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REPORT OF

The Director of the Mint

Upon the Production of the Precious Metals in the United States

DURING THE CALENDAR YEAR

1907

WASHINGTON
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1909

TREASURY DEPARTMENT,

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Director of the Mint.

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LETTER OF TRANSMITTAL.

Treasury Department,
Office of Director of the Mint,
Washington, December 10, 1908.

Sir: I have the honor to transmit herewith my report on the production of the precious metals in the United States and the world for the calendar year 1907, with a statement of the distribution, coinage, and consumption of the same, based upon the best information this bureau has been able to obtain. The returns for this country have been secured through official investigation, and the production of the world, as far as practicable, from official reports obtained from the different countries. In the absence of such reports unofficial data regarded as of the most reliable character have been used.

Respectfully,

Frank A. Leach,
Director of the Mint.

The Secretary of the Treasury.

PART I.

PRODUCTION, EMPLOYMENT, AND MOVEMENT OF GOLD AND SILVER IN THE UNITED STATES, AND SURVEY OF THE WORLD'S PRODUCTION OF GOLD AND SILVER IN 1907.

REPORT ON THE PRODUCTION OF THE PRECIOUS METALS IN THE UNITED STATES DURING THE CALENDAR YEAR 1907.

The gold and silver mines of the United States, Territories, and dependencies gave a production for the calendar year 1907 as follows:

Gold, 4,374,827 fine ounces, value $90,435,700.

Silver, 56,514,700 fine ounces, value $37,299,700.

As compared with the production of the year 1906 the yield of gold shows a falling off of $3,938,100, and only a difference of 3,200 ounces in silver. Of the 22 States, Territories, etc., producing gold, 10 show an increase of production, while 12 show a decrease; and of the 25 States, Territories, etc., producing silver, 16 show an increase and 8 a decrease.

The following table gives the approximate distribution to the producing States and Territories of the above-mentioned production totals. The figures arrived at are the results of the joint compilation of the Bureau of the Mint and the Geological Survey.

State or Territory.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Commercial value.[a]
Alabama	1,325	$27,400	600	$400
Alaska	894,424	18,489,400	179,300	118,300
Arizona	128,871	2,664,000	2,903,100	1,916,000
California	815,288	16,853,500	1,590,000	1,049,400
Colorado	1,010,921	20,897,600	11,494,400	7,587,000
Georgia	3,135	64,800	700	500
Idaho	60,754	1,255,900	7,888,400	5,206,300
Illinois	....	....	2,900	1,900
Michigan	....	....	331,300	218,700
Missouri	....	....	25,300	16,700
Montana	167,987	3,472,600	11,129,600	7,345,500
Nevada	745,507	15,411,000	8,280,500	5,465,100
New Mexico	15,964	330,000	599,500	395,700
North Carolina	3,807	78,700	25,200	16,600
Oregon	59,124	1,222,200	96,000	63,400
Philippine Islands	3,130	64,700	100	100
Porto Rico	58	1,200	....	....
South Carolina	2,811	58,100	100	100
South Dakota	200,185	4,138,200	106,600	70,400
Tennessee	184	3,800	58,300	38,500
Texas	48	1,000	305,300	201,500
Utah	247,758	5,121,600	11,406,900	7,528,500
Virginia	402	8,300	200	100
Vermont	....	....	3,800	2,500
Washington	12,689	262,300	84,000	55,400
Wyoming	455	9,400	1,600	1,100
Total	4,374,827	90,435,700	56,514,700	37,299,700

[a] At 66 cents per fine ounce.

The decrease in gold production noted for 1907 is the first halt of any importance in the remarkable growth of our annual yield since 1883, or twenty-four years ago, after which the tide of production turned from a course of several years of annual decrease to one of practically steady increase, the growth being from $30,000,000 for 1883 to $94,373,800 for 1906.

A study of the tables following will show the falling off for 1907 was largely due to the reduction of yields in Alaska, California, Colorado, Montana, and South Dakota. The shortage from Alaska is attributed to labor troubles and the shorter season; the yield of Colorado was curtailed by the destruction of large reduction works early in the season and the shutting down of some of the mines where gold was a by-product when the slump in the selling price of base metals took place later in the year; the reduction of the yield of Montana was largely, if not quite wholly, due to the curtailing of operations of mines where the gold output was a by-product; and the shortage in South Dakota was due to the fire early in the season which destroyed the works of one of the great mines of that State. The damage done was replaced, but not in time to make a showing in the year's product for 1907. The causes leading to a shortage in the yield of California are largely attributable to a lessened production of the quartz mines of the State. There was quite a falling off in the production from this source the year previous, but the shrinkage for 1907 was greater, and would have affected the showing of the State much more seriously had not the productions from the dredger work and from the reduction of ores from the new copper-smelting industry been so large as to more than compensate for the shrinkage in other branches of mining in California. However, it must be noted that labor troubles which involved the closing down of mines in the largest quartz-producing districts, and floods early in the season, which interfered with dredge mining, were agencies contributing somewhat to the causes for the reduced output of the State. But while the quartz mines of California have been falling off in production for the past two or three years, the fact will not justify the assumption that that branch of the mining industry is going into decline or that the mines are being exhausted. While now and then an old producer is closed down, a newly developed mine in some other section is opened to take its place. The quartz deposits of California will undoubtedly furnish a field of operation as long as there is any gold mining done in the United States.

The sum of the decrease of the yield of these five sections is $10,408,000, but the remarkable yield of the State of Nevada gives an increase which offsets over six million dollars of the loss. The increase of production shown in the reports from the other 9 States only aggregates $560,900, therefore does not materially influence the total for all the States.

PRODUCT OF GOLD IN THE SEVERAL STATES AND TERRITORIES IN 1906 AND 1907, WITH THE INCREASE AND DECREASE OF EACH IN THE LATTER YEAR.

State or Territory.	Value.			
	1906.	1907.	Increase.	Decrease.
Alabama	$23,500	$27,400	$3,900	....
Alaska	21,365,100	18,489,400	....	$2,875,700
Arizona	2,747,100	2,664,000	....	83,100
California	18,832,900	16,853,500	....	1,979,400
Colorado	22,934,400	20,897,600	....	2,036,800
Georgia	23,700	64,800	41,100	....
Idaho	1,035,700	1,255,900	220,200	....
Montana	4,522,000	3,472,600	....	1,049,400
Nevada	9,278,600	15,411,000	6,132,400	....
New Mexico	266,200	330,000	63,800	....
North Carolina	90,900	78,700	....	12,200
Oregon	1,320,100	1,222,200	....	97,900
Philippine Islands	....	64,700	64,700	....
Porto Rico	....	1,200	1,200	....
South Carolina	74,600	58,100	....	16,500
South Dakota	6,604,900	4,138,200	....	2,466,700
Tennessee	800	3,800	3,000	....
Texas	3,400	1,000	....	2,400
Utah	5,130,900	5,121,600	....	9,300
Virginia	10,300	8,300	....	2,000
Washington	103,000	262,300	159,300	....
Wyoming	5,700	9,400	3,700	....
Total	94,373,800	90,435,700	6,693,300	10,631,400
Net decrease	....	....	....	3,938,100

PRODUCT OF SILVER IN THE SEVERAL STATES AND TERRITORIES IN 1906 AND 1907, WITH THE INCREASE AND DECREASE OF EACH IN THE LATTER YEAR.

State or Territory.	Weight.			
	1906.	1907.	Increase.	Decrease.
	Fine ounces.	*Fine ounces.*	*Fine ounces.*	*Fine ounces.*
Alabama	100	600	500	....
Alaska	203,500	179,300	....	24,200
Arizona	2,969,200	2,903,100	....	66,100
California	1,517,500	1,590,000	72,500	....
Colorado	12,447,400	11,495,400	....	952,000
Georgia	300	700	400	....
Idaho	8,836,200	7,888,400	....	947,800
Illinois	....	2,900	2,900	....
Michigan	186,100	331,300	145,200	....
Missouri	31,300	25,300	....	6,000
Montana	12,540,300	11,129,600	....	1,410,700
Nevada	5,207,600	8,280,500	3,072,900	....
New Mexico	453,400	599,500	146,100	....
North Carolina	24,700	25,200	500	....
Oregon	90,700	96,000	5,300	....
Philippine Islands	....	100	100	....
South Carolina	100	100	....	....
South Dakota	155,200	106,600	....	48,600
Tennessee	25,600	58,300	32,700	....
Texas	277,400	305,300	27,900	....
Utah	11,508,000	11,406,900	....	101,100
Vermont	....	3,800	3,800	....
Virginia	100	200	100	....
Washington	42,100	84,000	41,900	....
Wyoming	1,100	1,600	500	....
Total	56,517,900	56,514,700	3,553,300	3,556,500
Net decrease	....	....	....	3,200

From the foregoing statements the conclusion may be drawn that the gold yield of the United States has not necessarily reached its maximum; that the lessening of the production in 1907 was very largely due to disasters and to causes other than mine exhaustion. Therefore, with the restoration of the destroyed reduction works, settlement of labor troubles, and considering the possibilities of the new camps of Nevada and the vast, rich gold-yielding sections of Alaska, there is no doubt about the United States maintaining its important position in the list of gold-producing countries of the world, and there is little probability of the amount of the annual product of gold being materially decreased in the near future.

The vast extent of nonprospected, or imperfectly prospected, territory within the great mining belt of the United States and Alaska can be relied upon for some time to come to furnish new mines to supply the production lost by the exhaustion of the old mines, with the possibility always of the development of camps of extraordinary productiveness. Alaska and Nevada have given strong proof of this within the last few years.

SILVER PRODUCTION.

The reports show the production of silver within the jurisdiction of the United States during the year 1907 to be practically the same as for the year preceding, although for the first six months of the year the production was largely in excess of the yield for the corresponding period in the year 1906, and there was every indication that the record year for silver output would be passed. The record year was 1892, when the yield was 63,500,000 fine ounces. But when the remarkable slump in metal prices began, late in the summer of 1907, it was seen that the yield was to be greatly curtailed, as many mines in the various mining States producing silver were closed down. Not only did the price of silver drop, but the prices obtainable for copper and lead where silver was an associate metal became unprofitable, and thus the closing of such mines further affected the output for the year. Considerably over one-half of the year's product of silver comes from copper and lead ores.

SUMMARY OF CONDITIONS IN THE STATES PRODUCING PRECIOUS METALS.

Alabama.—The gold yield of this State was increased by $3,900 and the silver yield by 500 ounces. These increases are the result of renewal of interest in the mines of the State and the introduction of some new methods of mining for the placer gold.

Alaska.—The yield of gold from this Territory was a disappointment, as the total only reached $18,489,400, or over two and three-quarter million dollars less than for the previous year. The causes given for this shrinkage are cited in the previous pages of this report. The production of silver shows a corresponding reduction. This is due to the fact that about all the silver recovered in Alaska is that alloyed with the gold produced from the mines. Alaska possesses vast possibilities as a producer of precious metals and will certainly remain on the list of big producers for years to come.

Of the total output of this Territory, $14,558,000 was deposited by the producers directly with the mints and assay offices, either by themselves or through agents, and the remainder of the output, about $1,000,000, was brought to the mints by private refineries. The sum of $15,000,000, or probably a little over, will represent the amount that was taken from the placer mines of the Territory, of which a little over $8,000,000 came from the Fairbanks or Tanana district, over $6,000,000 was produced in the Nome district, and the remainder of the output came from Circle, Cooks Inlet, Copper River, Council, Eagle, Keokuk, Southeast Alaska, Valdez, and several minor points.

Arizona.—There was a small decrease in the product of this Territory for 1907, which can be attributed principally to the fall in metal prices, as the greater part of the gold output of Arizona is recovered from the copper and lead ores. The shrinkage in gold value was $83,100, while for silver the loss in production was 66,100 fine ounces. The product of placer gold is a very small item in the total yield for the Territory. Copper production is the principal mining industry of this section.

California.—Which State stands third now in importance in the United States and Territories in gold production, showed a shrinkage in gold yield for the year of $1,979,400. The decrease for the year previous was only $364,200. The annual gold output of this State has been quite constant for a number of years past, so the curtailment this year was something of a surprise to those interested in production statistics. The causes are explained in another chapter of this report. While there was a shortage in the gold yield, there was an increase of 72,500 fine ounces of silver. Dredge-mining undertakings are increasing, and so far have proved very remunerative, with few exceptions. The copper yield is increasing, and the production of this metal in California will put the State in a place of importance in the list of copper-producing sections.

Colorado.—While this State stands at the head of the list of gold producers in the United States, the tables show the yield of gold for 1907 to have been $2,036,800 less than for the previous year. The shortage in silver production was 952,000 fine ounces. It is hardly to be expected, however, that Colorado will be displaced from its position as the leading gold-producing State in the near future. Under more favorable circumstances than the mine owners have had to contend with in the last two or three years the State should increase its yield of gold, for its mines are far from a state of exhaustion, and the undeveloped fields have possibilities of new large producers.

Georgia.—This State recorded quite an increase in its production of $64,800 in gold for the year, the amount being $41,100 greater than for the previous year. There are some eight or ten mines producing ore including copper and lead, some of which are equipped with 10-stamp mills. There are also several small producing placer mines. The gold ore is all low grade, but with skillful and economical handling it is made to yield a profit.

Idaho.—This year the gold yield of this State reached the sum of $1,255,900, an increase of nearly a quarter million dollars over the product of the year previous. The shutting down of the base bullion mines in the fall, however, contributed to a shortening of the silver yield of over 10 per cent, the product of silver for the year being only 7,888,400 fine ounces, or 947,800 ounces less than for the year previous. This, with the low price of silver, will make the shrinkage in returns to mine owners run into large figures. Lead has been the most important metal produced in Idaho for some years past. The value of the lead product for this year will amount to between twelve and fourteen million dollars.

Illinois.—This State appears in the column of silver-producing districts this year, although the amount is small, to wit, 2,900 fine ounces. This was recovered from ores carrying principally other metals with which the silver was associated.

Michigan.—While yielding no gold, Michigan has been on the list of silver-producing sections in a small way for many years past. This year the State distinguished itself by producing the largest annual yield in its mining record. The product was 331,300 fine ounces, or 145,200 ounces greater than the previous year. Michigan's silver is wholly a by-product in copper operations.

Missouri.—This is another State on the list of precious metal producing States, but for silver only. The record shows a decrease of 6,000 fine ounces, with a total yield of 25,300 ounces. This silver is wholly a product of the lead-mining operations.

Montana.—The State of Montana stands seventh in importance on the list of gold producers. The reduction in the gold output this year, with one exception, exceeds in per cent every other section, the amount being $1,049,400, or a little over 25 per cent. As a great portion of the State's product comes from the copper mines, it was to be expected that the greatly reduced copper mining would show itself in the gold and silver yield. The decrease in the silver output was 1,410,700 fine ounces.

Nevada.—This State for the last year or so has attracted more attention from the mining people of our country than any other section by reason of the remarkably rich mines being developed there. The gold production for the year is recorded at $15,411,000, or $6,132,400 in excess of the year previous. The increase in silver was also large, being 3,072,900 ounces. In addition to the Tonopah and Goldfield districts, which have made world-wide reputations for richness, other very promising districts have been discovered, so what Nevada can or is likely to do in the way of gold production in the next few years can not be reliably estimated. The new railroads being extended in several directions in various parts of the State are not only making the discovery of new mines probable, but are making possible the reopening and operating at a profit of old mines that have been shut down or abandoned for years.

New Mexico.—This Territory shows an increase of $63,800 in gold production and 146,100 fine ounces in silver. But the production of the precious metals is of lesser importance in the mineral wealth of this district, as the value of either the copper or zinc produced is several times greater. The total gold yield for the Territory for 1907 was $330,000. New and more extensive reduction works recently established and new developments are expected to further increase the annual output.

North Carolina.—While none of the eastern gold-producing States make large showings as compared with the newer fields of the West, North Carolina heads the list in the amount of production. This year's output, though, shows a small reduction compared with the yield of last year. The gold is recovered from 26 placer mines and 17 ore or quartz mines. Mr. H. D. McCaskey, of the Geological Survey, gives the average value of $8.09 in gold and silver per ton of quartz milled.

Oregon.—The production of gold in Oregon almost reached the sum of one and a quarter million dollars, which was a reduction of $97,900 in the output of the previous year, while there was a trifling increase in the amount of silver produced.

Philippine Islands.—This section is given a place in the column of precious metal producing localities of the United States for the first time. The product for 1907 was comparatively small, being only $64,700, but the probabilities are the amount in succeeding years will reach a much greater figure. The mining sections are receiving the attention of large operators, who are reported to view the possibilities of the prospects with much favor.

Porto Rico is another new contributor to the total gold production of our country, though the amount is small, being only $1,200.

South Carolina.—The showing made for 1907 in this State gives quite a percentage of reduction in the gold yield. The yield was $58,100, as against $74,600 last year. A remarkable feature of this product is that it nearly all comes from one ore mine, the average value of which ore is only $1.50 per ton; and, further, the mine is, and has been for years, operated at a very satisfactory profit to the owners.

South Dakota.—This State lost its fifth position as a gold producer for the year 1907, but unless Utah or Montana should make unusual discoveries in the year 1908 South Dakota will in all probability regain its place. The production of gold for 1907 was $4,138,200, and the shrinkage $2,466,700. This was the largest falling off in per cent in any State, and next to the largest in amount. The cause of the reduction was a disastrous fire, as stated in another part of this report. The damage has been repaired, and it is expected that in the future the State will be able to record an annual output near to its former average.

Tennessee.—This State produces a very small amount of gold, and that which was reported was practically all from copper ores, obtained in refining the copper, although there are some placer deposits, but not yielding any material amount. There was 58,300 fine ounces of silver recovered wholly from copper operations. This was an increase over the yield of the preceding year.

Texas.—This is another State which gives a small amount of gold annually, being of little importance in the total. In the matter of silver the State makes a fair showing, with an increase of 27,900 ounces over the preceding year. The precious metals are obtained almost wholly from lead ores.

Utah.—Through the failure of South Dakota, the State of Utah took the fifth place in the list of gold producers for 1907. The yield for the year was $5,121,600, or only $9,300 less than the previous year. The product for the first half of the year gave promise of an exceedingly large increase of output for the whole year, but the effect of the panic caused a great curtailment of the yield in the last half of the year. The value of the silver product, computed at the average commercial price, was $7,528,500, and the value of the copper and lead was approximately $20,000,000.

Vermont.—This State produced over $130.000 worth of copper in 1907, in the mining of which 3,800 fine ounces of silver and about 2 ounces of gold were recovered.

Virginia —The production of gold in this State was not up to the yield of the previous year by $2,000. The quartz carrying gold and silver mined during the year averaged $7.33 per ton. The total gold yield was $8,300.

Washington.—This State shows a large percentage of increase in the production of gold and silver for the year. With the extension of railway systems in Washington, the State can be expected to considerably increase the value of its annual yield. Its gold output reached $262,300 and silver $55,400 during this year.

Wyoming.—The tables gave this State credit for an increase of $3,700 in gold over the preceding year. The silver product is a small matter, being only 1,600 ounces.

APPROXIMATE GOLD PRODUCT OF THE MINES OF THE UNITED STATES DURING THE CALENDAR YEAR 1907.

Items.	Gold.
	Fine ounces.
Domestic product in fine bars reported by private refineries	2,689,955
Unrefined gold of domestic production deposited at the mints and assay offices	1,677,037
Domestic gold contained in ores, copper matte, etc., exported for reduction	7,835
Total domestic product for 1907	4,374,827

APPROXIMATE DISPOSITION OF THE GOLD PRODUCT OF THE MINES OF THE UNITED STATES DURING THE CALENDAR YEAR 1907.

Items.		Gold.
		Fine ounces.
Product of private refineries deposited at United States mints and assay offices		3,722,004
Product of private refineries exported as per custom-house returns		81,635
Product of private refineries sold for use in the arts		13,740
Domestic gold in ores, copper matte, etc., exported for reduction (custom-house returns)		7,835
Deposits of unrefined bullion at United States mints and assay offices		1,677.037
Total		5,502,251
Deduct:	*Fine ounces.*	
Bullion reported by domestic private refineries as contained in their product, but derived from foreign ores	771,302	
Bullion reported by domestic private refineries as from old material	285,078	
Differences in balances of domestic private refineries January 1 and December 31, 1907	42,538	
		1,098,918
Total disposition of domestic product		4,403,333

Approximate Silver Product of the Mines of the United States during the Calendar Year 1907.

Items.	Silver.
	Fine ounces.
Domestic product of fine bars reported by private refineries	55,596,752
Unrefined silver of domestic production deposited at the mints and assay offices	694,129
Domestic silver contained in ores, copper matte, etc., exported for reduction	223,819
Total domestic product for 1907	56,514,700

Approximate Disposition of the Silver Product of the Mines of the United States during the Calendar Year 1907.

Items.		Silver.
		Fine ounces.
Product of private refineries deposited at United States mints and assay offices		19,885,228
Product of private refineries exported as per custom-house returns		77,948,362
Product of private refineries sold for use in the arts		14,928,029
Domestic silver in ores, copper matte, etc., exported for reduction (custom-house returns)		223,833
Deposits of unrefined bullion at United States mints and assay offices		694,129
Differences in balances of domestic private refineries January 1 and December 31, 1907		2,013,704
Total		115,693,285
Deduct:	*Fine ounces.*	
Bullion reported by domestic private refineries as contained in their product, but derived from foreign ores	57,572,995	
Bullion reported by domestic private refineries as from old material	835,096	
		58,408,091
Total disposition of domestic product		57,285,194

Approximate Distribution, by Producing States and Territories, of the Product of Gold and Silver in the United States for the Calendar Year 1907.

[As estimated by the Director of the Mint.]

State or Territory.	Gold.		Silver.		Total value (silver at commercial value).
	Fine ounces.	Value.	Fine ounces.	Commercial value.	
Alabama	1,325	$27,400	600	$400	$27,800
Alaska	894,424	18,489,400	179,300	118,300	19,188,600
Arizona	128,871	2,664,000	2,903,100	1,916,000	4,580,000
California	815,288	16,853,500	1,590,000	1,049,400	17,902,900
Colorado	1,010,921	20,897,600	11,495,400	7,587,000	28,486,500
Georgia	3,135	64,800	700	500	64,300
Idaho	60,754	1,255,900	7,888,400	5,206,300	6,287,700
Illinois			2,900	1,900	1,900
Michigan			331,300	218,700	218,700
Missouri			25,300	16,700	16,700
Montana	167,987	3,472,600	11,129,600	7,345,500	10,818,100
Nevada	745,507	15,411,000	8,280,500	5,465,100	20,876,100
New Mexico	15,964	330,000	599,500	395,700	683,900
North Carolina	3,807	78,700	25,200	16,600	95,300
Oregon	59,124	1,222,200	96,000	63,400	1,285,600
Philippine Islands	3,130	64,700	100	100	64,800
Porto Rico	58	1,200			1,200
South Carolina	2,811	58,100	100	100	58,200
South Dakota	200,185	4,138,200	106,600	70,400	4,103,700
Tennessee	184	3,800	58,300	38,500	41,500
Texas	48	1,000	305,300	201,500	202,500
Utah	247,758	5,121,600	11,406,900	7,528,500	12,398,800
Vermont			3,800	2,500	2,500
Virginia	402	8,300	200	100	8,200
Washington	12,689	262,300	84,000	55,400	317,700
Wyoming	455	9,400	1,600	1,100	4,100
Total	4,374,827	90,435,700	56,514,700	37,299,700	127,737,300

DISTRIBUTION OF THE GOLD AND SILVER PRODUCT OF THE UNITED STATES FOR THE CALENDAR YEAR 1907 AS TO SOURCES OF PRODUCTION.

[Figures furnished by the United States Geological Survey.]

State or Territory.	Gold.		Silver.		
	Deep mines.	Placer.	Dry or siliceous ores.[a]	Lead ores.[b]	Copper ores.[c]
	Fine ounces.	*Fine ounces.*	*Fine ounces.*	*Fine ounces.*	*Fine ounces.*
Alabama	1,255	2	189		250
Alaska	138,292	797,752	97,729		52,055
Arizona	124,441	2,172	976,965	113,442	1,421,490
California	478,295	330,919	448,179	82,353	608,326
Colorado	1,002,590	4,878	7,411,905	3,576,386	241,485
Georgia	2,003	1,133	84		780
Idaho	43,489	17,265	846,595	7,032,829	536,007
Michigan					299,764
Missouri				25,692	
Montana	142,104	16,867	1,699,954	328,385	7,289,266
Nevada	582,637	2,674	6,479,370	318,286	285,947
New Hampshire				174	
New Mexico	15,027	935	542,425	47,796	115,323
North Carolina	3,500	476	775		20,892
Oregon	38,596	16,032	85,871		847
South Carolina	2,605	45	124		
South Dakota	200,140	45	93,895		
Tennessee	185				58,358
Texas	1		303,688		
Utah	247,321	438	131,693	7,354,407	3,503,976
Vermont	2				3,814
Virginia	395	5	148		73
Washington	11,475	1,057	45,184	7,205	2,970
Wyoming	256	195	77		3,638
Total	3,034,609	1,192,890	19,164,850	18,886,955	14,445,261

[a] Includes 126,808 ounces of silver from placer mines.
[b] Includes 93,419 ounces from zinc ores and 1,474,725 ounces from zinc-lead ore.
[c] Includes 489,825 ounces from copper-lead and copper-lead-zinc ores.

NOTE.—Illinois, Kentucky, Philippine Islands, and Porto Rico not included in above table.

DISTRIBUTION OF THE SILVER PRODUCT OF THE UNITED STATES AS TO THE SOURCES OF PRODUCTION.

Source.	1891.	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
	Per ct.	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*	*Per ct.*
Quartz mills	49.2	24.7	28.0	27.4	27.8	29.4	29.9	26.2	24.9	29.6	36.5
Lead bullion	40.6	56.2	51.1	50.8	46.7	48.5	45.6	46.8	44.8	30.8	36.0
Copper bullion	10.2	19.1	20.9	21.8	25.5	22.1	24.5	27.0	30.3	39.6	27.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The production of gold and silver from the mines of the United States since 1792 is shown in the following table.

The commercial value of the silver product is reckoned at the average yearly market price of silver on the New York market.

PRODUCT OF GOLD AND SILVER IN THE UNITED STATES FROM 1792 TO 1844 AND ANNUALLY SINCE.

[The estimate for 1792–1873 is by R. W. Raymond, commissioner, and since by Director of the Mint.]

Year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Commercial value.
1792 to July 31, 1834	677,250	$14,000,000	Insignificant	....
July 31, 1834, to Dec. 31, 1844	362,812	7,500,000	193,400	$253,400
1845	48,762	1,008,000	38,700	50,200
1846	55,341	1,140,000	38,700	50,300
1847	43,005	889,000	38,700	50,600
Total	1,187,170	24,537,000	309,500	404,500
1848	483,750	10,000,000	38,700	50,500
1849	1,935,000	40,000,000	38,700	50,700
1850	2,418,750	50,000,000	38,700	50,900
1851	2,660,625	55,000,000	38,700	51,700
1852	2,902,500	60,000,000	38,700	51,300
1853	3,144,375	65,000,000	38,700	52,200
1854	2,902.500	60,000,000	38,700	52,200
1855	2,660,625	55,000,000	38,700	52,000
1856	2,660,625	55,000,000	38,700	52,000
1857	2,660,625	55,000,000	38,700	52,400
1858	2,418,750	50,000,000	38,700	52,000
1859	2,418,750	50,000,000	77,300	105,100
1860	2,225,250	46,000,000	116,000	156,800
1861	2,080,125	43,000,000	1,546,900	2,062,000
1862	1,896,300	39,200,000	3,480,500	4,684,800
1863	1,935,000	40,000,000	6,574,200	8,842,300
1864	2,230,087	46,100,000	8,507,800	11,443,000
1865	2,574,759	53,225,000	8,701,200	11,642,200
1866	2,588,062	53,500,000	7,734,400	10,356,400
1867	2,502,196	51,725,000	10,441,400	13,866,200
1868	2,322,000	48,000,000	9,281,200	12,306,900
1869	2,394,562	49,500,000	9,281,200	12,297,600
1870	2,418,750	50,000,000	12,375,000	16,434,000
1871	2,104,312	43,500,000	17,789,100	23,588,300
1872	1,741,500	36,000,000	22,236,300	29,396,400
Total	58,279,778	1,204,750,000	118,568,200	157,749,900
1873	1,741,500	36,000,000	27,650,400	35,881,600
1874	1,620,122	33,490,900	28,868,200	36,917,500
1875	1,619,009	33,467,900	24,539,300	30,485.900
1876	1,931,575	39,929,200	29,996,200	34,919,800
1877	2,268,662	46,897,400	30,777,800	36,991,500
1878	2,477,109	51,206,400	35,022,300	40,401,000
1879	1,881,787	38,900,000	31,565,500	35,477,100
1880	1,741,500	36,000,000	30,318,700	34,717,000
1881	1,678,612	34,700,000	33,257,800	37,657,500
1882	1,572,187	32,500,000	36,196,900	41,105,900
1883	1,451,250	30,000,000	35,732,800	39,618,400
1884	1,489,950	30,800,000	37,743,800	41,921,300
1885	1,538,373	31,801,000	39,909,400	42,503,500
1886	1,686,788	34,869,000	39,694,000	39,482,400
1887	1,603,049	33,136,000	41,721,600	40,887,200
1888	1,604,478	33,167,500	45,792,700	43.045,100
1889	1,594,775	32,967,000	50,094,500	46,838,400
1890	1,588,877	32,845,000	54,516,300	57,242,100
1891	1,604,840	33,175,000	58,330,000	57,630,000
1892	1,597,098	33,015,000	63,500,000	55,662,500
1893	1,739,323	35,955,000	60,000,000	46,800,000
1894	1.910,813	39,500,000	49,500,000	31,422,100
1895	2,254,760	46,610,000	55,727,000	36,445,500
1896	2,568,132	53,088,000	58,834,800	39,654,600
1897	2,774,935	57,363,000	53,860,000	32,316.000
1898	3,118,398	64,463.000	54,438,000	32,118,400
1899	3,437,210	71,053,400	54,764.500	32,858,700
1900	3,829,897	79,171,000	57,647,000	35.741,100
1901	3,805,500	78,666,700	55,214,000	33,128,400
1902	3,870,000	80,000,000	55,500,000	29,415,000
1903	3,560,000	73,591,700	54,300,000	29,322,000
1904	3,892,480	80,464,700	57,682,800	33,456,000
1905	4,265,742	88,180,700	56,101,600	34,222,000
1906	4,565,333	94,373,800	56,517,900	38,256,400
1907	4,374,827	90,435.700	56,514,700	37,299,700
Total	84,258,891	1,741,784,000	1,611,830,500	1,351,841,600
Grand total	143,725,839	2,971,071,000	1,730,708,200	1.509,996,000

DEPOSITS OF GOLD.

The aggregate of the deposits of gold bullion and coin at the various offices connected with the service during the calendar year 1907 was 10,923,349 fine ounces of the value of $205,133,821. The redeposits, in addition to the above, were 5,077,236 fine ounces of the value of $104,955,775.

Domestic gold bullion deposited contained 5,399,045 fine ounces of the value of $111,608,158. Light weight domestic gold coin purchased over the counter and domestic gold coin transferred from the Treasury for recoinage contained 148,655 fine ounces of the value of $3,072,960.

Foreign gold coin and foreign gold bullion deposited contained 4,044,827 fine ounces of the value of $83,613,998, as follows:

Source.	Gold coin.		Refined bullion.		Crude bullion.	
	Fine ounces.	Value.	Fine ounces.	Value.	Fine ounces.	Value.
British Columbia			10,164	$210,111	55,728	$1,151,995
Northwest Territory					113,486	2,345,954
Ontario and Quebec					5,067	104,738
Nova Scotia			217	4,494	9,682	200,142
Mexico	1,987	$41,080	36	744	66,632	1,377,404
West Indies					1,402	28,990
Central America	77	1,592			59,923	1,238,728
South America	154	3,194	170	3,511	106,468	2,200,895
Great Britain	251,207	5,192,902	2,936,281	60,698,305	22,054	455,906
Russia	36,728	759,225				
Germany	179,984	3,720,595	1,629	33,682	9,961	205,905
Japan	21,693	448,425				
France	71,023	1,468,177	47,302	977,817	1,938	40,063
Spain	7,225	149,353				
Africa					92	1,902
Australasia					15	316
Manchuria					42	872
Dutch Guiana					44	901
Unclassified	26,416	546,079				
Total	596,494	12,330,622	2,995,799	61,928,664	452,534	9,354,711

Old jewelry deposited and surplus bullion and grains collected during the year contained 367,580 fine ounces of gold of the value of $6,838,704.

DEPOSITS AND PURCHASES OF SILVER.

Silver is coined in the United States on government account only. Deposits of silver bullion are received by the mints and assay offices, to be returned to the depositor in fine or unparted bars with the weight and fineness stamped thereon. These deposits are confined almost exclusively to the assay office at New York, and the bars, when returned to the depositor, are sold for use in the arts or exported.

The deposits and purchases of silver at the United States mints and assay offices during the calendar year 1907 were as follows:

Items.	Standard ounces.
Silver purchased	14,637,126.80
Silver parted from gold deposits	1,370,151.47
Uncurrent domestic coin for recoinage	992,572.41
For return in fine bars	6,672,744.61
For Mexican coinage	4,232,554.16
For Philippine coinage	9,990,435.41
Total	37,895,584.86

NOTE.—Included in silver "for Philippine coinage" are 8,400,231.25 standard ounces of Philippine silver coins for recoinage.

Foreign silver coin and bullion deposited contained 2,963,498 fine ounces, as follows:

Source.	Silver coin.		Refined bullion.		Crude bullion.	
	Fine ounces.	Coining value.	Fine ounces.	Coining value.	Fine ounces.	Coining value.
British Columbia					12,037	$15,563
Northwest Territory					26,758	34,596
Ontario and Quebec					11,612	15,140
Nova Scotia					881	1,139
Canada, unclassified					157	204
Mexico	10,149	$13,122	313,971	$405,943	2,282,127	2,950,629
Central America	57,733	67,180			84,968	98,872
South America	11,376	13,238			37,355	43,468
West Indies	82,620	96,140			141	164
Dutch Guiana					3	4
Spain	21,446	27,729				
Africa					9	11
Manchuria					17	21
Unclassified	10,137	11,942				
Total	193,461	229,351	313,971	405,943	2,456,065	3,159,811

Old jewelry deposited and surplus bullion and grains collected during the year contained 709,597 fine ounces of silver.

PURCHASE OF SILVER FOR SUBSIDIARY COINAGE.

The silver required for the coinage of subsidiary coin was purchased under section 3526 of the Revised Statutes of the United States. The following table shows the amount and cost of silver bullion purchased for the subsidiary silver coinage during the calendar year 1907:

Stock.	Standard ounces.	Cost.
Silver bullion purchased under section 3526, Revised Statutes, at Treasury Department	14,300,589.87	$8,119,619.67
Silver bullion purchased under section 3526, Revised Statutes, at mints	296,025.89	167,834.70
Assay coins purchased	399.08	438.11
Mutilated coin purchased	2,508.91	1,493.18
Surplus bullion purchased	38,461.75	23,422.41
United States coin transferred for recoinage	990,063.50	1,231,805.28
Partings, charges, and fractions purchased	1,371,801.68	811,475.05
Total	16,999,850.68	10,356,088.40

BALANCES OF SILVER BULLION.

The balances of silver bullion on hand December 31, 1907, at the New York assay office and the mints of the United States for subsidiary silver coinage and for the Philippine Islands were as follows:

Items.	Standard ounces.	Cost.
For subsidiary silver coinage	8,516,065.69	$5,015,651.58
Silver bullion for Philippine coinage	2,487,569.20	1,955,636.98
Total	11,003,634.89	6,971,288.56

DEPOSITS OF GOLD AND SILVER SINCE 1880.

The following table shows the amount of gold and silver (excluding redeposits) received at the mints and assay offices, by calendar years, since 1880:

Calendar year.	Gold.	Silver (coining value).	Total.
1880	$100,278,703	$35,103,825	$135,382,528
1881	98,763,426	30,326,848	129,090,274
1882	41,921,263	35,161,254	77,082,517
1883	51,089,456	36,978,184	88,067,640
1884	50,518,179	36,670,731	87,188,910
1885	44,714,052	35,836,725	80,550,777
1886	66.422,088	39,086,070	105,508,158
1887	74,724,077	46,381,333	121,105,410
1888	41,496,410	41,323,973	82,820,383
1889	42,599,206	41,977,265	84,576,471
1890	48,767,964	55,198,037	103,966,001
1891	60,849 552	70,994,120	131,843,672
1892	45,406,646	84,591,898	129,998,544
1893	69,419,223	62,465.005	131,884,228
1894	49,704,902	14,120,605	63,825.507
1895	69,433,579	13,843,636	83,277,215
1896	91,743,670	10,873,160	102,616,830
1897	87,924,232	12,707,128	100,631,360
1898	182,996,602	15,841,222	198,837,824
1899	129,798,782	13,481,927	143,280,709
1900	158,060,258	16,005,626	174,065,884
1901	136,858,186	7,486,293	144,344,479
1902	127,142,337	8,585.751	135,728,088
1903	139,475,047	28,898.656	168,373,703
1904	169,580,717	21,101,057	190,681,774
1905	139,769,034,	16,409,547	156,178,581
1906	186,748,794	18,927,533	205,676,327
1907	205,133,821	42,288,635	247,422,456

COINAGE OF THE UNITED STATES.

The following table exhibits the number of fine ounces and value of gold and silver coinage of the United States, by calendar years, since 1873:

Calendar year.	Gold.		Silver.		
	Fine ounces.	Value.	Fine ounces consumed.	Dollars coined.	Subsidiary coined.
1873	2,758,475	$57,022,748	3,004,803	$1,521,600	$2,503,147.60
1874	1,705,441	35,254,630	5,271,258	4,910,000	1,941,776.70
1875	1,594,050	32,951,940	11,504,961	6,279,600	9,068,293.00
1876	2,253,281	46,579,453	18,122,152	6,192,150	18,311,157.50
1877	2,128,493	43,999,864	21,378,389	13,092,710	15,300,335.50
1878	2,408,400	49,786,052	22,029,173	26,755,450	1,763,400.00
1879	1,890,499	39,080,080	21,323,113	27,561,641	8,135.00
1880	3,014,163	62,308,279	21,200,641	27,399,342	12,351.75
1881	4,685,162	96,850,890	21,609,422	27,928,935	11,228.75
1882	3,187,317	65,887,685	21,615,563	27,575,197	397,935.00
1883	1,414,581	29,241,990	22,581,870	28,471,018	775,950.45
1884	1,160,601	23,991,756	22,050,011	28,136,875	397,991.15
1885	1,343,519	27,773,012	22,387,196	28,397,767	264,409.20
1886	1,400,240	28,945,542	24,783,882	31,423,886	662,823.90
1887	1,159,664	23,972,383	27,139,034	33,611,710	1,579,371.40
1888	1,518,046	31,380,808	25,491,439	31,990,833	1,034,773.45
1889	1,035,899	21,413,931	27,412,169	34,651,811	844,872.15
1890	990,100	20,467,182	30,262,932	38,043,004	1,159,904.20
1891	1,413,614	29,222,005	21,086,062	23,562,735	3,956,121.60
1892	1,682,832	34,787,223	9,461,298	6,333,245	6,307,833.00
1893	2,757,231	56,997,020	6,440,604	1,455,792	7,347,005.30
1894	3,848,045	79,546,160	6,810,196	3,093,972	6,106,378.85
1895	2,883,941	59,616,358	4,164,996	862,880	4,835,130.25
1896	2,276,192	47,053,060	17,697,736	19,876,762	3,213,137.05
1897	3,677,878	76,028,485	14,006,626	12,651,731	5,835,566.30
1898	3,772,561	77,985,757	17,384,482	14,426,735	8,607,298.45
1899	5,386,277	111,344,220	19,612,343	15,182,846	10,878,673.90
1900	4,802,328	99,272,942	27,543,406	25,010,912	11,334,409.45
1901	4,921,439	101,735,188	23,437,523	22,566,813	8,271,647.75
1902	2,282,571	47,184,932	22,630,799	18,160,777	11,867,390.20
1903	2,113,212	43,683,970	14,894,507	10,343,755	9,530,685.00
1904	11,290,843	233,402,428	11,794,995	8,812,650	6,882,959.95
1905	2,401,260	49,638,441	4,580,542	....	6,332,180.90
1906	3,811,614	78,793,045	7.704,730	....	10,651,087.85
1907	6,381,025	131,907,490	9,532,590	....	13,178.435.75
Total	101,350,794	2,095,106,949	607,951,443	606,285,134	191,173,798.25

The domestic coinage manufactured during the calendar year 1907 was as follows:

Description.	Pieces.	Value.
Gold	9,367,350	$131,907,490.00
Subsidiary silver	61,784,795	13,178,435.75
Minor	147,353,418	3,042,126.18
Total	218,505,563	148,128,051.93

In addition to the above, there were made the following:

COINAGE FOR THE PANAMA GOVERNMENT.

Denomination.	Pieces.	United States nickel coinage value.
2½/100 balboas	800,000	$40,000.00
½/100 balboas	1,000,000	25,000.00
Total	1,800,000	65,000.00

COINAGE FOR THE MEXICAN GOVERNMENT.

Denomination.	Pieces.	Silver consumed.
		Fine ounces.
50 centavos	13,641,291	4,385,675.06
20 centavos	5,434,699	698,913.61
Total	19,075,990	5,084,588.67

COINAGE FOR THE PHILIPPINE GOVERNMENT.

The weight and fineness of the Philippine silver coins authorized under the act of March 2, 1903, and of the reduced weight and fineness authorized under the act of June 23, 1906, are as follows:

Denomination.	Act of March 2, 1903.		Act of June 23, 1906.	
	Weight in grains.	Fineness.	Weight in grains.	Fineness.
Peso	416.00	900	308.640	800
50 centavo	208.00	900	154.320	750
20 centavo	83.10	900	61.728	750
10 centavo	41.55	900	30.864	750

The total Philippine coinage under the act of March 2, 1903, from April, 1903, to December 31, 1906, was as follows:

Denomination.	Pieces.	Value.	Silver consumed.
		Peso.	*Fine ounces.*
Pesos, silver	27,024,358	27,024,358.00	21,078,999.24
50 centavo, silver	6,128,518	3,064,259.00	2,390,122.02
20 centavo, silver	7,997,768	1,599,553.60	1,246,152.22
10 centavo, silver	11,357,557	1,135,755.70	884,824.67
5 centavo, nickel	9,999,884	499,994.20	
1 centavo, bronze	37,845,284	378,452.84	
Half centavo, bronze	17,752,884	88,764.42	
Total	118,106,253	33,791,137.76	25,600,098.15

The Philippine coinage for the calendar year 1907 was made under the act of Congress of June 23, 1906, and the act of the Philippine Commission of December 6, 1906 (No. 1564), as follows:

CALENDAR YEAR 1907.

Denomination.	Pieces.	Value.	Silver consumed.
		Pesos.	*Fine ounces.*
Pesos	10,278,000	10,278,000.00	5,287,003.20
50-centavo pieces	3,312,625	1,656,312.50	798,756.70
20-centavo pieces	4,415,651	883,150.20	425,889.54
10-centavo pieces	6,430,781	643,078.10	310,124.41
Total	24,437,057	13,460,540.80	6,821,773.85

The Philippine Government returned for recoinage pesos and fractional coins weighing 7,560,208.13 fine ounces, equivalent to 9,692,575 pesos, or, in fractional coins, 9,704,238 pesos at the old weight and fineness, and will coin 14,697,139 pesos, or 15,676,948 pesos in fractional coins at the new weight and fineness.

In the 24,437,057 pieces coined as stated above were represented 13,460,520.80 pesos, containing 6,821,773.85 fine ounces.

There were coined from new bullion as follows:

Denomination.	Pieces.	Value.	Weight.
		Pesos.	*Fine ounces.*
50 centavos	2,208,625	1,104,312.50	532,554.70
20 centavos	2,510,651	502,130.20	242,152.29
10 centavos	4,020,781	402,078.10	193,902.16
Total	8,740,057	2,008,520.80	968,609.15

There was a further coinage of Philippine coins recoined as follows:

Denomination.	Pieces.	Value.	Weight.
		Pesos.	*Fine ounces.*
Pesos	10,278,000	10,278,000	5,287,003.20
50 centavos	1,104,000	552,000	266,202.00
20 centavos	1,905,000	381,000	183,737.25
10 centavos	2,410,000	241,000	116,222.25
Total	15,697,000	11,452,000	5,853,164.70

The total coinage for the government of the Philippine Islands from new bullion purchased since April, 1903, was as follows:

Denomination.	Pieces.	Value.	Silver consumed.
		Pesos.	*Fine ounces.*
Pesos (silver)	27,024,358	27,024,358.00	21,078,999.24
50 centavos (silver)	8,337,143	4,168,571.50	2,922,676.72
20 centavos (silver)	10,508,419	2,101,683.80	1,488,304.51
10 centavos (silver)	15,378,338	1,537,833.80	1,078,726.83
Total	61,248,258	34,832,447.10	26,568,707.30

TOTAL PHILIPPINE COINAGE TO JUNE 30, 1908.

Denomination.	Coined from new bullion, act of March 2, 1903.		Coined from Philippine coins received for recoinage, act of December 6, 1906.		Total.	
	Pieces.	Fine ounces.	Pieces.	Fine ounces.	Pieces.	Fine ounces.
Pesos	27,024,358	21,078,999.24	10,278,000	5,287,003.20	37,302,358	26,366,002.44
50-centavo pieces	8,337,143	2,922,676.72	1,104,000	266,202.00	9,441,143	3,188,878.72
20-centavo pieces	10,508,419	1,488,304.51	1,905,000	183,737.25	12,413,419	1,672,041.76
10-centavo pieces	15,378,338	1,078,726.83	2,410,000	116,222.25	17,788,338	1,194,949.08
Total silver	61,248,258	26,568,707.30	15,697,000	5,853,164.70	76,945,258	32,421,872.00
5-centavo pieces (nickel)	9,999,884				9,999,884	
1-centavo pieces (bronze)	37,845,284				37,845,284	
½-centavo pieces (bronze)	17,752,884				17,752,884	
Total minor	65,598,052				65,598,052	
Total coinage	126,846,310	26,568,707.30	15,697,000	5,853,164.70	142,543,310	32,421,872.00

MOVEMENT OF GOLD FROM THE PORT OF NEW YORK.

The superintendent of the United States assay office at New York has kindly prepared the following tables, giving exports of gold through the port of New York during the calendar year ended December 31, 1907:

Statement of United States Gold Coin and Gold Bullion Exported from the Port of New York to Europe during the Calendar Year 1907.

Date.	Country.	Amount.	Rate of exchange.
April 22	England	$3,600	$4.859
May 27	France	789,439	4.859
May 29	do	2,023,055	4.86¼
May 31	do	506,077	4.868
June 3	do	2,026,616	4.868
June 5	do	1,507,609	4.8685
June 7	do	2,110,396	4.871
June 11	do	1,498,277	4.871
June 15	do	2,006,431	4.871
June 18	do	988,532	4.87¼
June 19	do	2,504,000	4.87¼
June 20	England	997,967	4.874
June 21	do	1,760,017	4.8735
June 21	France	1,500,380	4.8735
June 21	Germany	975	4.8735
June 24	France	2,662,063	4.8735
June 25	do	2,009,718	4.873
June 28	England	92	4.8655
July 2	Germany	1,000,000	4.87
July 8	France	1,759,700	4.871
July 24	do	1,000,844	4.87
July 29	do	509,430	4.872
August 6	Germany	500,000	4.867
August 19	England	501,249	4.876
August 21	Germany	609,820	4.878
August 26	England	500,850	4.871
August 28	Germany	504,413	4.8665
October 21	do	1,503,514	4.858
Total		33,285,064	

Recapitulation of Gold Exports to Europe.

Description.	France.	England.	Germany.
United States coin		$92	$1,500,000
Foreign coin	$479,440	16,400	
United States assay office bars	25,402,567	3,760,083	2,617,747
Bullion		3,600	
Bullion in ore			975
Total	25,882,007	3,780,175	4,118,722

Grand total of exports to Europe		33,780,904
During the same period there was shipped to the West Indies, Central and South America, Canada and Cuba the following, viz:		
United States coin	$2,795,175	
Foreign coin	934,752	
Total gold export to other ports		3,729,927
Grand total of exports of gold		37,510,831

The imports during the same period were as follows:

From Europe:		
United States coin	$21,412,238	
Foreign coin	7,859,084	
Bullion	64,173,968	
Total gold imports to Europe		$93,445,290

From West Indies, Mexico, Central and South America, and Cuba:		
United States coin	$3,607,894	
Foreign coin	1,202,775	
Bullion	3,734,272	
Ore and base bullion	710,826	
Total gold imports from other ports		$9,255,767
Grand total of imports of gold		102,701,057

During the same period there was exported to England copper matte containing 51 ounces of fine gold and 240,101 ounces of fine silver.

IMPORTS AND EXPORTS OF THE PRECIOUS METALS IN THE PRINCIPAL COUNTRIES OF THE WORLD, 1907.

GOLD.

Country.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports
United States	$143,398,072	$55,215,681	$88,182,391	
Africa [a]	798,529	149,812,112		$149,013,583
Argentina	22,723,840	3,024,596	19,699,244	
Austria-Hungary	6,727,029	14,083,320		7,356,291
Brazil	22,000,000	2,012,624	19,987,376	
China	5,791,297	4,071,399	1,719,898	
Colombia		3,035,797		3,035,797
Costa Rica	320,000	339,518		19,518
Denmark	46,311	4,227,022		4,180,711
Egypt	36,228,859	23,387,523	12,841,336	
France	95,031,077	28,081,693	66,949,384	
Germany	47,974,186	52,803,425		4,829,239
Great Britain	282,532,906	247,539,433	34,993,473	
Guiana (British)		1,281,137		1,281,137
Honduras		10,000		10,000
India (British)	65,355,898	10,574,491	54,781,407	
Italy	37,318,615	1,086,301	36,232,314	
Japan	3,470,891	9,310,388		5,839,497
Korea		2,170,803		2,170,803
Mexico		14,268,373		14,268,373
Netherlands	12,543,581	183,737	12,359,844	
Norway	1,074,169	2,047,734		973,565
Peru	2,964,702	15,855	2,948,847	
Russia	1,154,172	6,367,754		5,213,582
Santo Domingo	150,180		150,180	
Siam	2,443,725		2,443,725	
Spain	119,978	28,595	91,383	
Straits Settlements	10,733,356	4,348,990	6,384,366	
Sweden	1,341,010		1,341,010	
Switzerland	13,542,821	7,642,945	5,899,876	
Venezuela	30,166	438,435		408,269

SILVER.

United States	$45,912,360	$61,625,866		$15,713,506
Africa [a]	3,585,856	250,425	$3,335,431	
Argentina	16,384	3,730	12,654	
Austria-Hungary	2,068,541	1,038,889	1,029,652	
Costa Rica		181,598		181,598
Colombia		150,515		150,515
China	6,444,439	26,718,234		20,273,795
Egypt	2,435,564	23,459	2,412,105	
France	63,237,415	39,046.409	24,191,006	
Germany	6,657,824	5,859,442	798,382	
Great Britain	88,710,562	82,345,312	6,365,250	
Guiana (British)	262,674	331,000		68,326
Honduras		250,000		250,000
India (British)	77,910,684	5,871,306	72,039,378	
Italy	5,206,310	420,825	4,785,485	
Japan	640,847	31,736	609,111	

[a] Annual statement of the trade of the United Kingdom with foreign countries and with British possessions.

IMPORTS AND EXPORTS OF THE PRECIOUS METALS IN THE PRINCIPAL COUNTRIES OF THE WORLD, 1907—Continued.

SILVER—Continued.

Country.	Imports.	Exports.	Excess of imports over exports.	Excess of exports over imports.
Mexico		$52,189,429		$52,189,429
Netherlands	$856,196	5,129,535		4,273,339
Norway	257,480	83,991	$173,489	
Peru		1,573,607		1,573,607
Russia	4,462,316	427,090	4,035,226	
Santo Domingo	56,980		56,980	
Siam	1,473,328	703,181	770,147	
Spain	919,547	2,931,903		2,012,356
Straits Settlements	16,644,031	19,495,564		2,851,533
Sweden	51,806		51,806	
Switzerland	7,821,495	2,370,845	5,450,650	
Venezuela		772		772

THE COURSE OF SILVER, 1907.

The price of silver, which had been gradually advancing in the London market for nearly four years, and had been maintained by the demands of the Indian government for currency purposes and the large purchases by the Bazaars, met with a sudden check early in October, 1907.

During the first part of October it was found that on account of the small rainfall in some of the provinces of India there would be a failure of the crops, and in consequence thereof the fear of a famine, from which the country suffered so greatly some years ago, was created. The result was that the Indian Bazaars, who are dealers in silver, became heavy sellers of the white metal in the London market, and under the forced sale and absence of any demand from other sources the price declined rapidly. No doubt the price was to some extent affected by the financial crisis in the United States that became so acute the latter part of the year, when silver for immediate delivery sold in the London market at from three-fourths of a cent to 1 cent an ounce less than sales for future delivery.

The highest, lowest, and average price of silver in the London market for silver 925 M (British standard) during the year and the equivalent in the money of the United States, and the bullion value of the standard silver dollar, are shown in the following statement:

Items.	Pence.	Equivalent per fine ounce.	Bullion value standard silver dollar.
Highest price	$32\frac{7}{16}$	$0.7110	$0.54996
Lowest price	$24\frac{1}{4}$	.53158	.41114
Average price	$30\frac{3}{16}$	.66157	.51164

The London price, September 30, 1907, was $31\frac{3}{16}$ pence for silver 0.925 fine, equal to $0.6836 per fine ounce. The closing price December 31, 1907, was $24\frac{7}{8}$ pence, equivalent to $0.5453 per ounce fine, a decline in the short period of three months of nearly 14 cents per ounce.

For many years prior to the closing of the government mints of India in June, 1893, to the unrestricted coinage of silver for the public there were a number of native mints which had the privilege of coining silver. A large amount of silver imported from 1835 to 1893 was coined by these native mints. For two years after the closing of the government mints in 1893 to the coinage of silver quite a large coinage was executed by the native mints. Arrangements, however, have been made by the government of India to substitute the regular government coinage for that of the native mints. The coinage executed by the native mints is being redeemed by the government at a fixed rate and used in the manufacture of the regular coinage.

The official figures of the imports of silver into India show that the value of the net imports from 1835 to 1907, inclusive, approximated $2,063,000,000. It is now estimated that the stock of silver coin in India is about $830,000,000, which would indicate that approximately $1,233,000,000 is either hoarded in the shape of bullion and coin or has been manufactured into ornaments for the natives.

It may be proper to remark that from 1835 to 1907 the absorption of gold by India has approximated $1,000,000,000, as shown by official figures giving the net imports of gold into that country.

Imports of silver into India from all sources during the last three years aggregated 300,180,000 fine ounces, of which 182,000,000 fine ounces were on government account for coinage purposes and 118,180,000 fine ounces were on private account. In the latter case it is presumed that the imports were made on account of the Bazaars, who import large amounts of silver bullion for sale to the natives, who hoard the same or have it manufactured into ornaments. The imports of silver into India for the three years were equal to 71.4 per cent of the world's production.

India has been enjoying great prosperity for the past three years, due to her enormous crops, creating a great demand for currency. It was necessary for the government to import large quantities of silver for conversion into coin to meet the demand, while the Bazaars, as stated heretofore, imported quantities of silver to meet the requirements of the natives.

For some years China has been making preparations to coin silver to a greater extent than heretofore, but so far her coinage has been a very limited one. The coinage of silver by China for the last two years aggregated only about $12,740,000 as against $10,000,000 in copper cash. A new dollar has recently been issued from the central mint at Tientsin that circulates at par with the Mexican dollar at Tientsin and Peking, being received by the foreign banks, merchants, and others. Since the Boxer trouble China has both bought and sold silver to a large extent, her purchases and sales being to a great degree dependent upon the rate of exchange.

During the last two years much of the silver that was imported into Manchuria during the Russian-Japanese war has found its way to the treaty ports of China, and has been sold for export. The official figures of India show that of the silver bullion imported during this period about 34,500,000 fine ounces came from China.

Should China adopt and carry into effect measures providing for a larger coinage of silver, it would lead to an improvement in the silver market. With the limited demands of the United States and the continental countries for silver for coinage and for use in the arts, should the rate of silver production be maintained, any permanent improvement in the price will, in a great measure, depend upon the requirements of India and China. It must be borne in mind that the production of silver is chiefly in the nature of a by-product deriver from lead and copper ores; therefore it is not probable that the rate of production will fall off so long as the demand for lead and copper exists, as at the present time.

Highest, Lowest, and Average Price of Silver Bullion and Value of a Fine Ounce Each Month during the Calendar Year 1907.

Month.	Highest.	Lowest.	Average price per ounce, British standard, 0.925.	Equivalent value of a fine ounce with exchange at par ($4.8665).	Average monthly price at New York of exchange on London.	Equivalent value of a fine ounce based on average monthly price and average rate of exchange.	Average monthly New York price of fine bar silver.
	Pence.	*Pence.*	*Pence.*				
January	$32\frac{7}{16}$	$31\frac{1}{4}$	31.7777	$0.69660	$4.8501	$0.69414	$0.69333
February	$32\frac{1}{8}$	$31\frac{1}{2}$	31.8463	.69810	4.8465	.69524	.69437
March	$32\frac{1}{16}$	$30\frac{7}{16}$	31.2980	.68608	4.8384	.68214	.68110
April	$30\frac{5}{8}$	30	30.2668	.66348	4.8551	.66193	.66062
May	$31\frac{1}{8}$	$29\frac{15}{16}$	30.4652	.66783	4.8655	.66773	.66648
June	$31\frac{1}{16}$	$30\frac{5}{8}$	30.8925	.67720	4.8708	.67779	.67820
July	$31\frac{15}{16}$	31	31.3657	.68757	4.8694	.68798	.68759
August	$32\frac{1}{4}$	$31\frac{1}{8}$	31.6805	.69447	4.8695	.69490	.69415
September	$31\frac{9}{16}$	$31\frac{1}{16}$	31.2725	.68552	4.8578	.68518	.68430
October	$30\frac{7}{8}$	$27\frac{7}{16}$	28.8634	.63272	4.8537	.63107	.63111
November	$28\frac{1}{16}$	$26\frac{5}{8}$	27.1538	.59524	4.8660	.59524	.59403
December	$26\frac{3}{4}$	$24\frac{1}{4}$	25.2450	.55340	4.8562	.55399	.55215
Average			30.1772	.66152	4.8582	.66061	.65978

EXPORTS OF SILVER TO THE EAST.

The exports of silver from London to India, China, and the Straits since 1881 have been as follows:

Calendar year.	India.	China.	Straits.	Total.
1881	$12,375,612	$3,898,860	$3,577,729	$19,852,201
1882	18,604,945	1,584,318	7,354,255	27,543,518
1883	18,040,140	4,212,574	11,189,631	33,442,345
1884	26,073,909	5,018,714	8,136,097	39,228,720
1885	30,913,667	3,160,315	3,108,146	37,182,128
1886	21,159,591	1,769,425	2,892,064	25,821,080
1887	19,798,328	1,427,179	2,766,946	23,992,453
1888	21,162,116	1,153,002	3,219,321	25,534,439
1889	28,392,786	2,731,861	8,181,141	39,305,788
1890	35,673,177	1,284,498	4,441,197	41,398,872
1891	21,717,992	1,177,620	10,754,800	33,650,412
1892	35,180,897	719,668	18,622,825	54,523,390
1893	34,319,877	11,635,650	7,847,295	53,802,822
1894	24,391,351	13,279,564	6,002,565	43,673,480
1895	17,638,610	8,042,003	3,668,772	29,349,385
1896	23,874,942	3,602,597	4,025,257	31,502,796
1897	28,250,305	2,721,522	3,597,331	34,569,158
1898	20,984,625	3,721,656	1,971,443	26,677,724
1899	25,597,912	6,929,117	1,396,223	33,923,252
1900	37,916,065	11,252,496	3,922,477	53,091,038
1901	36,987,395	4,101,764	3,150,630	44,239,789
1902	30,987,195	991,793	5,363,710	37,342,698
1903	36,125,636	1,508,907	3,999,674	41,634,217
1904	46,366,153	2,495,502	385,758	49,247,413
1905	36,754,830	4,315,841	186,382	41,257,053
1906	73,997,060	2,096,002	8,516	76,101,578
1907	51,935,064	2,420,354	3,448,645	57,804,063

VALUE OF NET IMPORTS OF SILVER INTO INDIA SINCE 1835.

The net imports in value of silver into India, average exchange rate of India rupee in London, and amount of council bills sold, by fiscal years ended March 31, is shown by the following table:

Year.	Net imports of silver.	Average rate of Indian rupee.	Amount of council bills sold.	Year.	Net imports of silver.	Average rate of Indian rupee.	Amount of council bills sold.
		Pence.				*Pence.*	
1835-36	[a] 16,118,960	....	$9,953,224	1872-73	$3,298,985	22¾	$67,834,606
1836-37	$6,176,311	22¾	9,938,522	1873-74	11,311,401	22.351	64,654,752
1837-38	9,173,294	23	8,303,149	1874-75	20,916,698	22.221	52,760,715
1838-39	12,671,392	23⅜	11,419,685	1875-76	6,826,414	21.645	60,294,052
1839-40	7,864,683	23½	7,005,448	1876-77	29,911,149	20.491	61,784,106
1840-41	6,679,118	23¼	5,715,461	1877-78	61,869,640	20.790	49,319,325
1841-42	5,887,052	22⅝	12,600,746	1878-79	15,910,390	19.761	67,880,692
1842-43	14,068,739	23½	5,827,332	1879-80	31,852,848	19.961	74,271,598
1843-44	17,237,334	23	13,634,624	1880-81	15,751,280	19.956	74,163,888
1844-45	8,719,684	21⅝	12,248,742	1881-82	21,699,764	19.895	89,604,086
1845-46	4,112,529	21¾	14,919,273	1882-83	29,614,971	19.525	73,584,015
1846-47	6,322,979	22⅝	15,071,750	1883-84	25,372,923	19.536	85,649,451
1847-48	2,204,565	22	7,503,189	1884-85	28,367,364	19.308	66,957,731
1848-49	1,344,618	21⅛	9,193,767	1885-86	42,960,530	18.254	50,089,386
1849-50	5,810,633	22½	14,283,752	1886-87	25,306,454	17.441	59,061,202
1850-51	10,410,803	24¼	15,750,223	1887-88	31,623,459	16.899	74,742,515
1851-52	14,016,886	24⅛	13,516,816	1888-89	30,709,917	16.379	69,410,203
1852-53	22,293,629	23⅞	16,152,235	1889-90	36,741,437	16.566	75,306,635
1853-54	11,279,345	24⅙	18,738,775	1890-91	51,993,287	18.089	77,713,304
1854-55	138,797	23⅛	17,860,191	1891-92	30,611,949	16.733	78,320,740
1855-56	40,085,623	24⅛	7,222,081	1892-93	39,083,615	14.984	80,454,024
1856-57	56,413,954	25⅛	13,722.119	1893-94	40,466,665	14.546	46,378,884
1857-58	61,012.039	24⅝	3,059,077	1894-95	16,812,318	13.100	82,268,679
1858-59	[a] 77,283.420	(b)	124,451	1895-96	18,206,409	13.641	85,278,507
1859-60	[a] 111,475.630	(b)	22,843	1896-97	17,163,165	14.454	76,028,915
1860-61	[a] 53,280,090	(b)	3,879	1897-98	26,447,429	15.393	44,271,918
1861-62	$43,988,930	23⅞	5,809,277	1898-99	16,442,585	15.979	91,064,157
1862-63	60,757,238	23⅞	32,321,230	1899-1900	11,653,240	16.068	92,495,079
1863-64	61,950,883	23⅞	43,698,839	1900-1901	30,792,023	15.973	65,501 810
1864-65	48,793,010	23⅞	33,040,970	1901-2	23,318,450	15.988	89,444,37[illegible]
1865-66	89,904,731	23¾	33,900,604	1902-3	22,569,699	16.0018	90,029,987
1866-67 [c]	32,474,026	23	24,661,422	1903-4	44,294,125	16.0491	116,111,293
1867-68	26,230,510	23⅛	20,134,097	1904-5	43,024,637	16.045	118,866,929
1868-69	40,330,842	23⅛	18,033,989	1905-6	51,010,716	16.048	135,972.219
1869-70	34,500,818	23¼	33,968,764	1906-7	77,881,906	16.0926	144,042,151
1870-71	4,273,507	22⅜	41,090,337	1907-8	....	16.0291	73,640,175
1871-72	30,574,254	23⅛	50,175,265				

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[a] Rupees.

[b] From 1858-59 to 1860-61, inclusive, the home treasury was opened at all times for the sale of bills on India, at rates altered from time to time by advertisement. Consequent on the mutiny, it was necessary to refrain from drawing on India and exchange was raised to a prohibitory rate.

[c] Eleven months.

GOLD AND SILVER IMPORTED INTO AND EXPORTED FROM BRITISH INDIA IN EACH FISCAL YEAR ENDING MARCH 31, FROM 1873-74 (BRITISH STANDARD OUNCES).

[From Financial and Commercial Statistics of British India.]

Period.	Gold.			Silver.		
	Imported.	Exported.	Net imports.	Imported.	Exported.	Net imports.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
1873-74	....	....	331,554	....	....	8,747,151
1874-75	....	....	446,964	....	....	16,269,590
1875-76	....	....	355,985	....	....	5,451,074
1876-77	....	....	62,696	....	....	25,229,986
1877-78	....	....	102,628	....	....	51,436,354
1878-79	....	....	177,101	....	....	13,916,146
1879-80	....	....	374,227	....	....	27,581,194
1880-81	....	....	777,533	....	....	13,642,358
1881-82	....	....	1,028,240	....	....	18,852,031
1882-83	....	....	1,048,810	....	....	26,216,055
1883-84	....	....	1,138,584	....	....	22,448,221
1884-85	....	....	973,053	....	....	25,393,863
1885-86	....	....	544,437	....	....	40,677,913
1886-87	....	....	393,174	....	....	25,078,814

Gold and Silver Imported into and Exported from British India, etc.—Cont'd.

Period.	Gold.			Silver.		
	Imported.	Exported.	Net imports.	Imported.	Exported.	Net imports.
	Ounces.	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
1887-88	569,684	41,646	528,038	37,877,141	5,994,542	32,782,599
1888-89	512,287	50,710	461,577	37,844,665	5,408,636	32,436,029
1889-90	850,232	76,848	773,384	43,940,659	5,296,885	38,643,774
1890-91	1,175,875	161,646	1,014,229	56,190,870	4,661,785	51,529,085
1891-92	709,102	285,454	423,648	38,177,580	5,829,142	32,348,438
1892-93	272,442	726,925	—454,483	54,180,144	8,656,632	45,523,512
1893-94	474,635	378,399	96,236	60,328,296	5,999,323	54,328,973
1894-95	236,873	926,843	—689,970	32,638,069	5,598,047	27,040,022
1895-96	695,055	372,432	322,623	34,082,810	7,064,731	27,018,079
1896-97	657,238	347,873	309,365	37,520,322	11,591,234	25,929,088
1897-98	1,129,149	397,114	732,035	68,535,612	24,250,995	44,284,617
1898-99	1,432,461	410,461	1,022,000	49,226,780	26,061,355	23,165,425
1899-1900	1,914,037	353,225	1,560,812	50,663,542	32,017,260	18,646,282
1900-1901	1,987,738	1,881,060	106,678	64,746,549	15,311,385	49,435,164
1901-2	1,372,249	1,097,743	274,506	66,726,972	27,721,780	39,005,192
1902-3	2,187,384	770,766	1,416,618	75,569,185	32,294,876	42,274,309
1903-4	3,330,466	1,764,229	1,566,237	104,324,765	25,142,629	79,182,136
1904-5	3,605,017	2,088,025	1,516,992	98,118,908	23,769,313	74,349,595
1905-6	2,396,420	2,461,892	—65,472	88,853,079	4,535,314	84,317,765
1906-7	3,019,161	642,010	2,377,151	125,878,008	7,679,151	118,198,857

Note.—The quantities in the column "net imports" for both gold and silver, for the years 1873–74 to 1886–87, are estimated only, deduced from the declared values of the trade for those years by the following process:

For gold, the rupee value of the monthly net imports was converted into sterling at the average rate of exchange in each month, and this sterling value was then divided by the English mint price of gold (£3 17s. 10½d.). For silver the average price of 107 rupees per 100 tolas, or 285.33 rupees per 100 ounces, was taken as the basis of the value of the annual imports.

IMPORTS AND EXPORTS OF BULLION INTO AND FROM LONDON.

The imports and exports of bullion from various countries during the calendar year 1907 were as follows:

Country.	Imports.		Exports.	
	Gold.	Silver.	Gold.	Silver.
Austria	....	....	....	$1,582
Belgium	$5,163,215	$489,317	$7,470	389
France	25,325,777	1,857,047	35,080,788	7,400,603
Germany	37,762,327	1,733,739	15,394,088	1,793,101
Holland	3,763,513	365,406	2,223,436	46,480
Sweden and Denmark	....	....	....	87,597
Russia	....	....	33,092	498,227
Spain, Portugal, etc	790,115	288,180	243	372,248
Gibraltar	245,315	37,769	262,791	12,896
Malta	125,604	81,115	389,320	....
Egypt	8,860,193	59,104	22,288,789	1,557,616
Ceylon	172,805	4,493,648	5,840	125,059
Bombay	10,387,734	1,436,060	29,821,912	54,201,744
Madras				
Calcutta				
Singapore	950,719	4,662,827	1,766,578	5,009,361
Penang				
Hongkong	243,325	1,836,603	....	2,722,563
Shanghai				
Japan	....	419	....	....
West coast of Africa	5,746,169	146,788	274,252	3,517,667
British South Africa	143,288,496	105,647	633,497	69,834
United States	3.183,995	58,211,618	89,323,688	3,212
Mexico, South America, etc. (except Brazil), West Indies	4.021,982	1,243,464	19,612,944	1,105,732
Brazil	1,931,597	....	17,790,070	1,228,290
British North America	....	628	....	658,428
Australia	21,053,730	346,660	....	1,810,971
New Zealand	2,975,884	266,246	....	....
Other countries	1.828,918	123,327	12,630,636	121,711
Total	277.821,413	77,785,612	247,539,434	82.345.311

STOCK OF MONEY IN THE UNITED STATES.

On December 31, 1907, the stock of domestic coin in the United States was $2,157,749,401, as shown by the following official table:

Items.	Gold.	Silver.	Total.
Estimated stock of coin December 31, 1906	$1,436,780,728	$695,644,667	$2,132,425,395
Net imports United States coin, calendar year 1907	22,664,477	559,172	23,223,649
United States coin returned in transports from the Philippine Islands, not recorded at the custom-house, calendar year 1907		[a] 39,798	39,798
Coinage, calendar year 1907	131,907,490	13,178,436	145,085,926
Total	1,591,352,695	709,422,073	2,300,774,768
Less:			
United States coin melted for recoinage (face value)	3,100,499	1,324,868	4,425,367
United States coin estimated to have been used in the arts	3,500,000	100,000	3,600,000
Amount deducted by the former Director of the Mint (Mr. Geo. E. Roberts) as errors in former estimates since 1873	135,000,000		135,000,000
Total	141,600,499	1,424,868	143,025,367
Estimated stock of coin in the United States December 31, 1907	1,449,752,196	707,997,205	2,157,749,401

[a] Of this amount $11,000 were in one-dollar pieces.

NOTE.—The number of standard silver dollars coined to December 31, 1907, was 570,272,610, which, added to the Hawaiian dollar coinage, 500,000, plus the number imported from the Philippine Islands, 150,000, and the number returned in government transports, 473,730, equals 571,396,340. Since July 1, 1898, the number of standard silver dollars exported in transports has been 2,495,000; and since 1883 the number melted has been 185,540 (see Report of the Director of the Mint, 1907, p. 14), and the number of Hawaiian dollars melted to December 31, 1907, has been 454,818, a total disposition of 3,135,358, leaving in the United States on December 31, 1907, 568,260,982 standard silver dollars, and 139,736,223 dollars in subsidiary silver coins.

The value of the gold and silver bullion held by the government institutions on December 31, 1907, was as follows:

GOLD AND SILVER BULLION IN THE MINTS AND ASSAY OFFICES ON DECEMBER 31, 1907.

Metal.	Value.
Gold	$162,937,136
Silver (cost)	6,971,289
Total	169,908,425

The total metallic stock in the United States was as follows:

METALLIC STOCK IN THE UNITED STATES ON DECEMBER 31, 1907.

Bullion and coin.	Value.
Gold	$1,612,689,332
Silver	714,968,494
Total	2,327,657,826

The total metallic stock in the United States on December 31, 1906, was as follows:

METALLIC STOCK ON DECEMBER 31, 1906.

Bullion and coin.	Value.
Gold	$1,593,323,415
Silver	698,654,544
Total	2,291,977,959

The increase in the stock on December 31, 1907, as compared with December 31, 1906, was $35,679,867.

The location of the stock of metallic and paper money in the United States December 31, 1907, was as follows:

Money.	In Treasury.	Outside of Treasury.	Total.
Metallic:			
Gold bullion	$162,937,136	....	$162,937,136
Silver bullion	6,971,289	....	6,971,289
Gold coin	788,467,689	$661,284,507	1,449,752,196
Silver dollars	477,370,649	90,890,333	568,260,982
Subsidiary silver coin	4,982,578	134,753,645	139,736,223
Total metallic	1,440,729,341	886,928,485	2,327,657,826
Paper:			
Legal-tender notes (old issue)	2,150,048	344,530,968	346,681,016
Legal-tender notes (act of July 14, 1890)	11,910	5,467,090	5,479,000
National-bank notes	11,784,051	678,346,844	690,130,895
Total notes	13,946,009	1,028,344,902	1,042,290,911
Gold certificates	60,242,100	708,073,769	....
Silver certificates	4,796,817	466,619,183	....
Total certificates	65,038,917	1,174,692,952	....
Grand total	....	3,089,966,339	3,369,948,737

GOLD AND SILVER USED IN INDUSTRIAL ARTS IN THE UNITED STATES DURING THE CALENDAR YEAR 1907.

Among the purveyors of gold and silver bars for use in the industrial arts the United States mint at Philadelphia and the United States assay office at New York hold the foremost places; consequently the larger portion of the material consumed in the arts is brought under government notice and is a matter of public record.

The following table gives the value of the gold and the quantity of the silver bars issued by the government institutions and private refineries during the calendar year 1907:

GOLD AND SILVER BARS ISSUED BY THE GOVERNMENT INSTITUTIONS AND MANUFACTURED BY PRIVATE REFINERIES FOR USE IN THE INDUSTRIAL ARTS DURING THE CALENDAR YEAR 1907.

Material used.	Gold.		Total.	Silver.		Total.
	Government institutions.	Private refineries.		Government institutions.	Private refineries.	
				Fine ounces.	*Fine ounces.*	*Fine ounces.*
Domestic bullion	$15,262,907.18	$284,017.00	$15,546,924.18	2,503,661.77	14,928,029.00	17,431,690.77
Foreign material	14,501,615.54	955.00	14,502,570.54	1,764,616.75	2,863,591.00	4,628,207.75
United States coin	....	369,184.00	369,184.00	....	1,500.00	1,500.00
Old jewelry	4,721,540.98	2,456,034.00	7,177,574.98	608,673.67	1,623,867.00	2,232,540.67
Total	34,486,063.70	3,110,190.00	37,596,253.70	4,876,952.19	19,416,987.00	24,293,939.19

The total amount of gold and silver coin estimated to have been used in the arts during the calendar year was $3,500,000 and $100,000, respectively; changing the above table so that it will include these amounts will make the total industrial consumption for 1907 as follows:

Material used.	Gold.	Silver.
		Fine ounces.
Domestic bullion	$15,546,924	17,431,691
Foreign material	14,502.571	4,628,208
United States coin	3,500.000	77,344
Old material	7,177,575	2.232,541
Total	40,727,070	24,369,784

The following table gives the amounts and the classification of gold and silver used in the industrial arts in the United States since 1880:

GOLD AND SILVER BARS FURNISHED FOR USE IN MANUFACTURES AND THE ARTS, AND CLASSIFICATION OF THE MATERIAL USED, BY CALENDAR YEARS, SINCE 1880.

GOLD.

Calendar year.	New material.				Old material.	Grand total.
	United States coin.	Domestic bullion.	Foreign bullion and coin.	Total new material.		
1880	$3,300,000	$6,000,000	$1,267,600	$10,567,600	$395,000	$10,962,600
1881	2,700,000	7,000,000	1,547,800	11,247,800	522,900	11,770,700
1882	2,500,000	7,000,000	671,500	10,171,500	696,500	10,868,000
1883	4,875,000	7,840,000	194,500	12,909,500	1,549,300	14,458,800
1884	5,000,000	6,000,000	385,500	11,385,500	3,114,500	14,500,000
1885	3,500,000	6,736,927	178,913	10,415,840	1,408,902	11,824,742
1886	3,500,000	7,003,480	638,003	11,141,483	1,928,046	13,069,529
1887	3,500,000	9,090,342	384,122	12,974,464	1,835,882	14,810,346
1888	3,500,000	9,893,057	718,809	14,111,866	2,402,976	16,514,842
1889	3,500,000	9,686,827	291,258	13,478,085	3,218,971	16,697,056
1890	3,500,000	10,717,472	362,062	14,579,534	3,076,426	17,655,960
1891	3,500,000	10,697,679	628,525	14,826,204	4,860,712	19,686,916
1892	3,500,000	10,588,703	771,686	14,860,389	4,468,685	19,329,074
1893	1,500,000	8,354,482	804,254	10,658,736	2,777,165	13,435,901
1894	1,500,000	6,430,073	543,585	8,473,658	2,184,946	10,658,604
1895	1,500.000	8,481,789	471,027	10,452,816	2,976,269	13,429,085
1896	1,500,000	7,209,787	316,804	9,026,591	2,369,343	11,395,934
1897	1,500,000	7,184,822	613,981	9,298,803	2,571,428	11,870,231
1898	1,500,000	9,463,262	437,641	11,400,903	2.164,976	13,565,879
1899	1,500.000	13,267,287	344,906	15,112,193	2,734,985	17,847,178
1900	1,500,000	14,582,627	584,903	16,667,530	3,480,612	20,148,142
1901	1,500,000	16,296,688	685,642	18,482,330	3,386,626	21,868,956
1902	1,500,000	18,653,625	851,673	21,005,298	4,677,549	25,682,847
1903	3,500,000	19,944,365	953,597	24,397,962	4,665,589	29,063,551
1904	3,500,000	12,298,459	7,131,577	22,930,036	5,725,927	28,655,963
1905	3,500,000	20,559,910	3,562.069	27,621,979	5,586,636	33,208,615
1906	3,500,000	18,667,804	10,452,037	32,619,841	6,506,922	39,126,763
1907	3,500,000	15,546,924	14,502,571	33,549,495	7,177,575	40,727,070
Total	78,875,000	305,196,391	50,296,545	434,367,936	88,465,348	522,833,284

SILVER (FINE OUNCES).

1880	464,063	3,867,188	273,023	4,604,274	112,148	4,716,422
1881	154,687	4,563,281	286,945	5,004,913	137,672	5,142,585
1882	154,687	4,906,920	340,544	5,402,151	164,665	5,566,816
1883	154,687	3,576,143	119,883	3,850,713	434,595	4,285,308
1884	154,687	3,480,469	502,734	4,137,890	131,484	4,269,374
1885	154,687	3,511,310	48,501	3,714,498	357,472	4,071,970
1886	154,687	2,804,635	638,562	3,597,884	312,589	3,910,473
1887	154,687	3,173,208	506,595	3,834,490	371,719	4,206,209
1888	154,687	5,010.218	597,082	5,761,987	504.318	6,266,305
1889	154,687	5,644,495	508,920	6,308,102	472,582	6,780,684

GOLD AND SILVER BARS FURNISHED FOR USE IN MANUFACTURES, ETC.—Continued.

SILVER (FINE OUNCES)—Continued.

Calendar year.	New material.				Old material.	Grand total.
	United States coin.	Domestic bullion.	Foreign bullion and coin	Total new material.		
1890	154,687	5,525,155	963,254	6,643,096	495,077	7,138,173
1891	154,687	5,637,642	971,516	6,763,845	663,707	7,427,552
1892	154,687	5,572,006	966,643	6,693,336	500,706	7,194,042
1893	77,344	5,082,054	1,346,326	6,505,724	945,787	7,451,511
1894	77,344	6,635,685	759,824	7,472,853	944,504	8,417,357
1895	77,344	7,599,323	752,942	8,429,609	1,065,902	9,495,511
1896	77,344	6,160,777	821,387	7,059,508	832,860	7,892,368
1897	77,344	7,116,009	616,579	7,809,932	853,457	8,663,389
1898	77,344	9,417,981	489,160	9,984,485	734,233	10,718,718
1899	77,344	8,388,658	529,137	8,995,139	1,583,678	10,578,817
1900	77,344	10,423,485	940,450	11,441,279	1,776,006	13,217,285
1901	77,344	11,809,418	1,038,409	12,925,171	1,208,523	14,133,694
1902	77,344	15,236,711	1,289,623	16,603,678	2,741,331	19,345,009
1903	77,344	15,016,256	954,930	16,048,530	3,919,726	19,968,256
1904	77,344	16,629,834	1,218,122	17,925,300	2,554,687	20,479,987
1905	77,344	16,580,307	2,754,003	19,411,654	4,289,023	23,700,677
1906	77,344	15,231,628	2,734,187	18,043,159	3,810,105	21,853,264
1907	77,344	17,431,691	4,628,208	22,137,243	2,232,541	24,369,784
Total	3,480,467	226,032,487	27,597,489	257,110,443	34,151,097	291,261,540

EXCHANGE OF FINE GOLD BARS FOR GOLD COIN AND GOLD BULLION.

The value of the fine gold bars furnished to the trade in exchange for gold coin and bullion, monthly, by the United States mint at Philadelphia and assay office at New York, for the calendar year 1907, was as follows:

Month.	Exchanged for gold coin.			Exchanged for gold bullion.		
	Philadelphia.	New York.	Total.	Philadelphia.	New York.	Total.
January	$624,201.72	$2,150,687.68	$2,774,889.40	$21,068.23	$440,359.21	$461,427.44
February	513,889.49	1,922,185.33	2,436,074.82	24,873.57	283,599.55	308,473.12
March	627,814.66	2,236,246.46	2,864,061.12	24,676.40	301,145.88	325,822.28
April	794,410.35	2,036,175.09	2,830,585.44	18,833.92	385,341.97	404,175.89
May	700,746.27	5,666,191.09	6,366,937.36	31,810.78	293,176.91	324,987.69
June	631,099.70	23,708,103.04	24,339,202.74	26,289.52	245,032.47	271,321.99
July	545,019.99	5,085,591.23	5,630,611.22	26,504.23	377,169.38	403,673.61
August	637,676.27	4,370,267.07	5,007,943.34	22,639.70	345,105.43	367,745.13
September	621,527.34	2,409,188.80	3,030,716.14	25,530.31	345,804.34	371,334.65
October	707,648.51	3,822,984.27	4,530,632.78	23,202.84	458,591.95	481,794.79
November	595,923.22	975,903.97	1,571,827.19	34,587.03	215,048.70	249,635.73
December	262,430.41	891,402.50	1,153,832.91	23,928.62	173,697.21	197,625.83
Total	7,262,387.93	55,274,926.53	62,537,314.46	303,945.15	3,864,073.00	4,168,018.15

Of the total value of bars ($62,537,314.46) exchanged for coin, $32,219,268.91 were exported and $30,318,045.55 were used in the industrial arts.

THE WORLD'S INDUSTRIAL CONSUMPTION.

Since 1893 this bureau has endeavored to obtain, through the United States representatives abroad, official estimates from the various countries of the world of the consumption of precious metals in the arts and industries.

The results of these inquiries, though at times incomplete, are considered sufficiently full and accurate to encourage renewed efforts.

The interrogatories sent out by this bureau for 1907 were as follows:

"What was the weight of fine gold used in the industrial arts during the calendar year 1907? What amount of this was new gold, what amount old gold, and what amount coins?

"What was the weight of fine silver used in the industrial arts during the calendar year 1907? What amount of this was new silver, what amount old silver, and what amount coins?"

The following verbatim replies of all countries as to their consumption of precious metals in the arts during 1907 are submitted, together with such other matter relative to the question as was assumed to be of value:

Australia.—New Zealand: "Not ascertained, but insignificant." South Australia: "No record kept by manufacturers." Tasmania: "No means of ascertaining quantities, but probably insignificant." Victoria: "The weight of gold used in the industrial arts during the calendar year 1907 is not ascertainable." Queensland: "There is no information available to cover the weight of fine gold used in the industrial arts during the year 1907."

Africa.—Transvaal: "It is understood that a certain amount of current coinage is utilized in the industrial arts of this colony. No information as to the amount of coinage so absorbed can be given, however, as the laws of the Transvaal do not require any returns made on this point. It may be safely asserted that very little gold or silver is used in the industrial arts."

Austria-Hungary.—Austria: "The gold and silver submitted for stamping in 1907 can be inferred from the domestic consumption of the precious metals in the industries, which are as follows:

GOLD.

Classification.	Weight, unrefined.	Fineness.	Fine weight.
	Kilograms.	*Thousandths.*	*Kilograms.*
Domestic gold wares	7,068.733	0.581532	4,110.694
Domestic gilded wares (the gold reckoned at 2½ per cent of the total weight of 174.785 kilograms)			4.370
Domestic wire (the consumption of fine gold for firegilded. pure, 12-carat and 6-carat, and for galvano-gilded wire)			25.331
Total			4,140.395

"In regard to other ueses of fine gold in the industries in the year 1907 (especially in fire and galvanic gilding) there are no data at hand.

"In the last three years the consumption of fine gold was as follows:

	Kilograms, fine.
1904	386.614
1905	687.549
1906	583.962

"According to the average of the three years as stated above, the consumption of gold in industries other than before specified would amount to 552.708 kilograms in 1907.

SILVER.

Classification.	Weight, unrefined.	Fineness.	Fine weight.
	Kilograms.	*Thousandths.*	*Kilograms.*
Domestic silverware	59,135.195	0.796536	47,103.312
Silver wire:			
Pure	1,828.976	0.9333	1,816.722
Half pure	55.294	0.465	25.712
Quarter pure	15.360	0.180	2.765
Total			48,948.511

"In relation to the consumption of silver in the industries other than those above mentioned, no data are yet at hand. In the last three years the consumption of silver in these industries has been as follows:

	Kilograms, fine.
1904	8,985.807
1905	8,815.148
1906	10,688.920

"According, then, to the average consumption of these three years, that of 1907 should figure up to 9,496.625 kilograms.

"Besides the silver employed as alloy in gold wares being, on the average, 10 per cent of the full weight, would amount to 706.873 kilograms. According to past experience in the consumption of the precious metals in the industries old material formed 27 per cent of the total in gold and 15 per cent in silver.

"The result for 1907 may therefore be represented as follows:

	Kilograms, fine.
Gold:	
New material	3,425.965
Old material	1,267.138

"The gold thus used consisted of—

	Per cent.
Coins	62.50
Alloyed gold	15.44
Gold scrap	4.50
Fine gold	17.56

	Kilograms.
Silver:	
New material	50,279.208
Old material	8,872.801

"The silver thus used consisted of:

	Per cent.
Coins	0.26
Alloyed silver	11.34
Silver scrap	4.61
Fine silver	83.79

Hungary.—"In regard to gold and silver used for commercial purposes, no exact data are to hand.

"At the royal Hungarian bureau for the stamping and melting of metals the following were delivered during the year 1907 for stamping:

	Kilograms.
Domestic goods:	
Goldware	2,461.660
Silverware	11,345.125
Gilded wire	372.870
Silver wire	459.800

Foreign goods:	Kilograms.
Different goldware	437.076
Different silverware	1,670.250
Gold watches	185,654
Silver watches	1,437.610
Gilded wire	3.660
Silver wire	4,570

"For the coinage of metals 1.30679 kilograms of fine gold and 9.3161 kilograms of fine silver were used."

Assuming, as in former years, that the gold contains 47 per cent and the silver 64 per cent new material, the amount of fine gold used was 1,626.631 kilograms, and the amount of fine silver 9.547.107 kilograms for 1907.

Brazil.—"Unascertainable."

China.—"No information is available. With reference to the industrial consumption of the precious metals, no supervision over the industrial arts is maintained either by the central or provisional governments. This work is carried on by innumerable small shops, which obtain their materials from various and irregular sources."

Colombia.—"It is not possible to obtain exact information in regard to the amount of gold and silver used in the arts. From inquiries among the jewelers of the larger cities I estimate that such an amount did not exceed $15,000 in gold and $10,000 in silver. Bar or nugget gold is usually used by the jewelers. Silver coins are used for this purpose more than new silver."

Costa Rica.—"No data; amount insignificant."

Denmark.—"The figures as to the weight of fine gold and silver used in the industrial arts during 1907 are not obtainable."

Egypt.—"No means of knowing."

France.—"The amount of gold used may be estimated at 31,800 kilograms fine gold. The weight of gold objects stamped at the mint and bureaus of control was 15,500 kilograms.

"The amount of silver used in the industrial arts was 302,000 kilograms of fine silver. Objects stamped at mint and other bureaus of control, 143,000 kilograms (0.950 and 0.800 fine)."

Assuming, as formerly, that 25 per cent of the gold and 15 per cent of the silver was from old material, the fine weight and value of the new gold used in the arts in France in 1907 was 23,850 kilograms, of the value of $15,850,710, and for silver 256,700 kilograms, representing 8,252,905 ounces, fine.

Germany.—"For the calendar year 1907 no official data have been collected on this subject."

In the absence of any data for the year 1907, the official figures for 1905 are repeated, viz. $11.000.000 for gold and 6,500.000 ounces, fine, for silver.

Great Britain.—"No information available."

The report of Dr. T. K. Rose, chemist and assayer of the royal mint, London, states that there were 503,995 ounces of gold and 6,024,558 ounces of silver, British standard, of wares assayed and marked at Birmingham, Sheffield, and Chester in 1907. The number of ounces of gold (503,995), British standard, less 25 per cent for old material used, equals 346,497 ounces, fine, of the value of $7,162,729. The silver (6,024,558 ounces), less percentage deducted for old material used equals 4,179,537 ounces, fine.

These figures represent only such amounts as were presented for assaying and stamping, and not the total consumption of the precious metals for industrial purposes in Great Britain during 1907. No additional information having been received regarding the amounts of gold and silver used in the arts and industries in Great Britain during 1906 and 1907, the estimate for 1905, viz, $14,500,000 for gold and 7,500,000 fine ounces for silver, is repeated.

Greece.—"Not known."

Guiana (*British*).—"Exact amount not possible to obtain; very small at best."

Haiti.—"There are no statistics showing the amount of fine gold or silver used in the arts. Other than photography there seems to be no industrial use of gold or silver."

Honduras.—"No data as to gold used in the arts; probably none. Silver, amount insignificant."

India (*British*).—"I have not been able to obtain data on which to base intelligent answers to these questions. The only answer supplied by the government is: 'There are no data from which to make an estimate, except that it may be said that all the uncoined gold imported is manufactured into plate and ornaments.'

"All gold produced in the Indian mines is exported to London for assay. The imports of uncoined gold in 1907–8 amounted in value to about $35,796,235. So it may be said that that much gold was used in the industrial arts, or is held in stock for that purpose. There is no way of telling how much of gold coins were melted and thus used.

"The quantity of silver in sterling value employed in industry is officially stated to be about $23,000,000. Silver for rupee coinage is imported direct by the government. No silver is produced from mines in India."

The number of fine ounces representing the above value is 34,848,485, which is submitted as the amount of new material used in the arts during 1907.

Italy.—"The use of precious metals in the arts and manufactures being entirely free, by virtue of the law of May 2, 1872, there is no means for answering these questions."

The estimates for former years are repeated, viz, $3,000,000 in gold and 2,000,000 fine ounces in silver.

Japan.—"Weight of fine gold and silver used in the industrial arts is unknown."

Netherlands.—"The quantity of gold used in the industrial arts may be estimated at 950 kilograms of fine gold, and the quantity of silver at 12,611 kilograms of fine silver. Whether this was obtained from new gold or coins can not be stated."

The above weights represent $631,370 in gold and in silver 405,444 ounces, fine. Heretofore this bureau has estimated Netherlands and Belgium together, and in the absence of any figures for Belgium the estimate for both countries for 1905 is repeated, viz, gold, $1,500,000; silver, 1,000,000 ounces, fine.

Norway.—"As to the weight and value of any gold and silver employed for industrial purposes, information is not available."

Russia.—"There were presented for stamping at the mint in 1907 gold objects weighing 502 poods, 19 pounds, 21 zolotniks. The objects were watches and watch cases of gold 65,720 pieces.

"The amount of fine gold used in the mint for manufacture of medals, etc., was 21 poods, 5 pounds, 80 zolotniks. There were presented to the mint for stamping 245,665 silver watches and watch cases, weighing 7,385 poods, 18 pounds, 63 zolotniks.

"The amount of silver used in the manufacture of medals, etc., was 48 poods, 38 pounds, 62 zolotniks."

The gold objects stamped at the mint equal 264,628 ounces, fine, and the amount of fine gold used for medals equals 11,136 ounces, fine, a total of 275,764 ounces, fine, valued at $5,700,548.

The silver objects stamped at the mint equal 3,889,519 ounces, fine, and the amount of fine silver used for medals equals 25,788 ounces, a total of 3,915,307 ounces, fine.

Santo Domingo.—"Inappreciable."

Siam.—"No information."

Spain.—"Not known."

Straits Settlement.—"Both gold coin and bullion are used in the industrial arts and no statistics whatever are kept of the account, hence it is impossible to answer the questions."

Sweden.—"At least 700 kilograms of fine gold and 8,000 kilograms of fine silver were used in Sweden during 1907, but the exact quantity can not be stated. It is impossible to state how much of this was old gold, gold coin, old silver, or silver coin."

Switzerland.—"The weight of fine gold used for industrial purposes amounted to about 11,000 kilograms. For lack of information it is impossible to specify here the exact quantity of new gold, old gold, and of gold coin used for industrial purposes; yet it may be possible that a considerable quantity of new gold coins of full weight have been melted. As regards the fine silver used in 1907 for industrial purposes, its total weight is about 69,000 kilograms. In view of the low value of silver, it is to be presumed that silver in bullion (no coins) was melted for industrial purposes."

Turkey.—"The total amount of metal used is unknown. The weight of articles presented at the Imperial mint to be stamped was 3,945,870 kilograms."

Other countries.—The estimate for 1905, viz, gold, $3,000,000 and silver, 2,000,000 fine ounces, is assumed to be the amounts used for industrial purposes in the countries other than those above mentioned in 1907.

The world.—Although the data for an estimate upon the world's consumption of the precious metals in the arts and industries are confessedly incomplete and unsatisfactory, we venture, upon the strength of the foregoing information to submit the following estimate:

Country.	Gold.	Silver.
		Fine ounces.
United States	$33,549,500	22,137,200
Great Britain	14,500,000	7,500,000
France	15,850,700	8,252,900
Germany	11,000,000	6,500,000
Switzerland	7,310,600	2,218,300
Italy	3,000,000	2,000,000
Russia	5,700,500	3,915,300
Austria-Hungary	3,358,800	1,923,700
Netherlands and Belgium	1,500,000	1,000,000
Sweden	465,200	257,200
Colombia	15,000	15,200
Other countries	3,000,000	2,000,000
Total	99,250,300	57,719,800
India (British)	35,796,200	34,848,500
Grand total	135,046,500	92,568,300

THE WORLD'S PRODUCTION OF GOLD AND SILVER IN 1907.

GOLD.

The world's production of gold for 1907 was 19,860,620 ounces, fine, valued at $410,555,300, while the production for 1906 was 19,445,452 fine ounces, valued at $401,973,200, showing an increased product in 1907 of 415,168 fine ounces, of a value of $8,582,100.

SILVER.

The silver product of the world for the same period was 185,014,623 ounces, fine, while the product for 1906 was 165,382,372 ounces, fine, an increased product for 1907 of 19,632,251 ounces, fine.

The table following shows the increase and decrease in production for each country in 1907 as compared with 1906:

Increase and Decrease during 1907 as Compared with 1906.

Country.	Gold.		Silver.	
	Increase in 1907.	Decrease in 1907.	Increase in 1907.	Decrease in 1907.
	Fine ounces.	*Fine ounces.*	*Fine ounces.*	*Fine ounces.*
United States		190,506		3,200
Mexico	7,084		5,921,935	
Canada		176,104	4,211,135	
Africa	790,525		87,967	
Australasia		324,773	4,845,785	
Russia	347,698			34,061
Austria-Hungary		6,310		62,089
Germany		670		608,347
Norway			26,041	
Sweden	260			2,614
Italy		79	65,394	
Spain			32,503	
Turkey		73	29,477	
Argentina	4,717		10,738	
Bolivia and Chile	10,525		2,072,963	
Colombia	51,509		285,384	
Ecuador		1,310		11,136
Brazil		18,493		
Venezuela		141		
Guiana (British)		14,671		
Guiana (Dutch)		2,377		
Peru		15,212	2,161,880	
Uruguay	975			
Central America	9,533		222,737	
Japan	1,080		305,439	
Korea		5,425		
Siam	5,466			
India (British)		82,437		
East Indies (British)	5,466			
East Indies (Dutch)	18,931		74,320	
Total	1,253,769	838,581	20,353,698	721,447
Net increase	415,168		19,632,251	

The following table shows, by calendar years, the production and value of gold and silver in the world since 1860:

PRODUCT OF GOLD AND SILVER IN THE WORLD SINCE 1860.

[The annual production of 1860 to 1872 is obtained from 5-year period estimates, compiled by Dr. Adolph Soetbeer. Since 1872 the estimates are those of the Bureau of the Mint.]

Calendar year.	Gold.		Silver.		
	Fine ounces.	Value.	Fine ounces.	Commercial value.	Coining value.
1860	6,486,262	$134,083,000	29,095,428	$39,337,000	$37,618,000
1861	5,949,582	122,989,000	35,401,972	46,191,000	45,772,000
1862	5,949,582	122,989,000	35,401,972	47,651,000	45,772,000
1863	5,949,582	122,989,000	35,401,972	47,616,000	45,772,000
1864	5,949,582	122,989,000	35,401,972	47,616,000	45,772,000
1865	5,949,582	122,989,000	35,401,972	47,368,000	45,772,000
1866	6,270,086	129,614,000	43,051,583	57,646,000	55,663,000
1867	6,270,086	129,614,000	43,051,583	57,173,000	55,663,000
1868	6,270,086	129,614,000	43,051,583	57,086,000	55,663,000
1869	6,270,086	129,614,000	43,051,583	57,043,000	55,663,000
1870	6,270,086	129,614,000	43,051,583	57,173,000	55,663,000
1871	5,591,014	115,577.000	63,317,014	83,958,000	81,864,000
1872	5,591,014	115,577,000	63,317,014	83,705,000	81,864,000
Total	78,766,630	1,628,252,000	547,997,231	729,563,000	708,521,000
1873	4,653,675	96,200,000	63,267,187	82,120,800	81,800,000
1874	4,390,031	90,750,000	55,300,781	70,674,400	71,500,000
1875	4,716,563	97,500,000	62,261,719	77,578,100	80,500,000
1876	5,016,488	103,700,000	67,753,125	78,322,600	87,600,000
1877	5,512,196	113,947,200	62,679,916	75,278,600	81,040,700
1878	5,761,114	119,092,800	73,385,451	84,540,000	94,882,200
1879	5,262,174	108,778,800	74,383,495	83,532,700	96,172,600
1880	5,148,880	106,436,800	74,795,273	85,640,600	96,705,000
1881	4,983,742	103,023,100	79,020,872	89,925,700	102,168,400
1882	4,934,086	101,996,600	86,472,091	98,232,300	111,802,300
1883	4,614,588	95,392,000	89,175,023	98,984,300	115,297,000
1884	4,921,169	101,729,600	81,567,801	90,785,000	105,461,400
1885	5,245,572	108,435,600	91,609,959	97,518,800	118,445,200
1886	5,135,679	106,163,900	93,297,290	92,793,500	120,626,800
1887	5,116,861	105,774,900	96,123,586	94,031,000	124,281,000
1888	5,330,775	110,196,900	108,827,606	102,185,900	140,706,400
1889	5,973,790	123,489,200	120,213,611	112,414,100	155.427,700
1890	5,749,306	118,848,700	126,095,062	131,937,000	163,032,000
1891	6,320,194	130,650,000	137,170,919	135,500,200	177,352,300
1892	7,094,266	146,651,500	153,151,762	133,404,400	198,014,400
1893	7,618,811	157,494,800	165,472,621	129,119,900	213,944,400
1894	8,764,362	181,175,600	164,610,394	104,493,000	212,829,600
1895	9,615,190	198,763,600	167,500,960	109,545,600	216.566,900
1896	9,783,914	202,251,600	157,061,370	105,859,300	203,069,200
1897	11,420,068	236,073,700	160,421,082	96,252,700	207,413,000
1898	13,877,806	286,879,700	169,055,253	99,742,600	218,576,800
1899	14,837,775	306,724,100	168,337,453	101,002,600	217,648,200
1900	12,315,135	254,576.300	173.591,364	107,626,400	224,441,200
1901	12,625,527	260,992,900	173,011,283	103,806,700	223,691,300
1902	14,354,680	296,737,600	162,763,483	86,264,700	210,441,900
1903	15,852,620	327,702,700	167,689,322	90,552,200	216,810,300
1904	16,804,372	347,377,200	164,195,266	95,233.300	212.292,900
1905	18,396,451	380,288,700	172,317,688	105,113,700	222,794,500
1906	19,445,452	401,973,200	165,382,372	111,945,700	213,827,600
1907	19,860,620	410,555,300	185,014,623	122,109,700	239,210,800
Total	311,453,932	6,438,324,600	4,312.977,063	3,484,068,100	5,576,374,000
Grand total	390,220,562	8,066,576,600	4,860,974,294	4,213,631,100	6,284,895,000

WORLD'S COINAGE, 1905, 1906, AND 1907.

In the Appendix will be found a table, revised from the latest information received, exhibiting the coinages of the various countries of the world during the calendar years 1905, 1906, and 1907.

COINAGE OF NATIONS.

Calendar year.	Gold.	Silver.
1905	$245,954,257	$173,333,093
1906	366,326,788	155,590,466
1907	411,803,902	221,652,826

While the above figures represent, as accurately as the bureau has been able to ascertain, the total value of the gold and silver coinage of the world during the calendar years 1905, 1906, and 1907, they do not accurately represent the value of the coinage from new material alone, but include the value of the recoinage of foreign and domestic coins and that derived from old material, plate, jewelry, etc., melted and used in coinage. Many foreign governments in their reports to the bureau failed to separate the values of the coinage derived from these various sources.

The following table exhibits, by calendar years, the fine ounces and value of the gold and silver coinage of the world since 1873:

COINAGE OF GOLD AND SILVER OF THE MINTS OF THE WORLD FOR THE CALENDAR YEARS SINCE 1873.

Calendar year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Coining value.
1873	12,462,890	$257,630,802	101,741,421	$131,544,464
1874	6,568,279	135,778,387	79,610,875	102,931,232
1875	9,480,892	195,987,428	92,747,118	119,915,467
1876	10,309,645	213,119,278	97,899,525	126,577,164
1877	9,753,196	201,616,466	88,449,796	114,359,332
1878	9,113,202	188,386,611	124,671,870	161,191,913
1879	4,390,167	90,752,811	81,124,555	104,888,313
1880	7,242,951	149,725,081	65,442,074	84,611,974
1881	7,111,864	147,015,275	83,539,051	108,010,086
1882	4,822,851	99,697,170	85,685,996	110,785,934
1883	5,071,882	104,845,114	84,541,904	109,306,705
1884	4,810,061	99,432,795	74,120,127	95,832,084
1885	4,632,273	95,757,582	98,044,475	126,764,574
1886	4,578,310	94,642,070	96,566,844	124,854,101
1887	6,046,510	124,992,465	126,388,502	163 411,397
1888	6,522,346	134,828,855	104,354,000	134,922,344
1889	8,170,611	168,901,519	107.788,256	139,362,595
1890	7,219,725	149,244,965	117,789,228	152,293,144
1891	5,782,463	119,534,122	106,962,049	138,294,367
1892	8,343,387	172,473,124	120,282,947	155,517,347
1893	11,243,342	232,420,517	106,697,783	137,952,690
1894	11,025,680	227,921,032	87,472,523	113,095,788
1895	11,178,855	231,087,438	98,128,832	126,873,642
1896	9,476,639	195,899,517	123,394,239	159,540,027
1897	21,174,850	437,722,992	129,775,082	167,790,006
1898	19,131,244	395,477,905	115,461,020	149,282,936
1899	22,548,101	466,110,614	128,566,167	166,226,964
1900	17,170,053	354,936,497	143,362,948	185,358.156
1901	12,001,537	248,093,787	107,439,666	138,911,891
1902	10,662,098	220,405,125	149,826,725	193,715,362
1903	11,634,166	240,499,547	161,159,508	211,795,829
1904	22,031,285	455,427,085	136,518 406	176,508,646
1905	11,898,037	245,954,257	134,062,314	173,333,093
1906	17,721,058	366,326.788	120,339,501	155,590,466
1907	19,921,014	411,803,902	171,434,608	221,652,826
Total	371,251,464	7,684,448,923	3,851,389,935	4,983,002,859

PART II.

THE COLLECTION OF THE STATISTICS OF THE PRODUCTION OF GOLD AND SILVER IN THE UNITED STATES IS NOW MADE BY THE BUREAU OF THE MINT IN CONJUNCTION WITH THE GEOLOGICAL SURVEY. THE FOLLOWING REVIEW OF THE MINING OF GOLD AND SILVER IN THE DIFFERENT PRODUCING STATES AND TERRITORIES HAS BEEN PREPARED BY THE AGENTS OF THE GEOLOGICAL SURVEY LOCATED IN THE RESPECTIVE STATES AND TERRITORIES.

ALASKA.

The gold production of Alaska in 1907 was chiefly from three districts, which, arranged in order of their importance, are as follows: Fairbanks, Seward Peninsula, and southeastern Alaska. Much the larger part of the gold came from the placers of Fairbanks and Seward Peninsula, but the lode mines also of southeastern Alaska made a considerable output. The yield from the placer districts was much smaller than it would have been but for the labor difficulties which prevailed at both Fairbanks and Seward Peninsula throughout much of the open season. The production from auriferous lode mines was practically all in southeastern Alaska, though there was a small output from one mine in southwestern Alaska and one on Seward Peninsula. In addition to these there was a small gold production from the copper mines of Prince of Wales Island and Prince William Sound. In the Juneau district the conditions were also adverse to a large production. A strike closed the Treadwell group of mines for nearly a month, and the litigation in the Berners Bay district was not settled, as had been anticipated. Six mines, in addition to the Treadwell group, were operated in 1907. In addition to this, there was one small mine in operation in Chichagof Island, in the Sitka district, and there were several small gold mines which made minor productions in the Ketchikan district.

In the Copper River basin some placer mining was carried on in the Nizina and Chistochina districts, which included the installation of a hydraulic plant on Chititu Creek. Most of the energies in this field were directed toward the extension of a railroad up the Copper River Valley.

In the Cook Inlet field a little mining was done in the Sunrise district, and more extensive operations were carried on in the Yentna district. Worthy of note also is the reported discovery of placer gold on Valdez Creek, a tributary of the Upper Susitna.

In the Yukon basin important discoveries of placer gold were made in every one of the creeks in Fairbanks district. The most important feature of developments in this field was the extension of the Tanana Valley Railway to Cleary Creek, which gives transportation to all the important developed placers of the district. Operations were also carried on in the smaller placer districts of the Yukon basin, but no important discoveries were made except in the Koyukuk, where some very rich placers were found. In the Chandlar district some workable placers were discovered during 1907. The installation of four dredges in the Forty-mile district marks an important advance in the mining industry of the Yukon. Some workable placers were discovered in the Innoko district in the winter of 1906–7, and this led to a large influx of miners and prospectors during 1907. This field appears to be promising, but no placers were developed during 1907.

On the Seward Peninsula the labor difficulties decreased the production of gold as compared with the previous year. There was little activity in the Seward Peninsula looking toward larger mining enterprises. Most of the attention of the mining men was directed toward the exploitation of the rich placers of the third beach line. In the Kougarok district, however, some large ditches were constructed, and in other parts of the peninsula plans were formulated for the installation of dredges. The Fairhaven district, in the northeastern part of the peninsula, and the Council district, next to the Nome district, were the largest producers of the Seward Peninsula.

ARIZONA.

Arizona now leads all the States of the Union in the production of copper, even though the 1907 product was considerably less than that of 1906 on account of the decline in metal prices and the financial depression of the latter part of the year. There was a decrease of nearly 12 per cent in the gold output and nearly 17 per cent in that of silver, due entirely to the retarded copper output. The most striking result of the high prices of the metals was the unusual number of new shippers who made an effort to get even a small amount of low-grade ore on the market before prices fell. Unlike Idaho, where the majority of the ore is shipped outside the State, Arizona treated nearly all the mine product at her own smelters, of which there were 11 active ones in 1907. Five of these—the United Verde, Calumet and Arizona, Detroit, Arizona Copper Company, Saddle Mountain, Helvetia, and Duquesne—merely treated ore from the mines owned by the same company, but the Old Dominion, Copper Queen, Shannon, and Consolidated Arizona Smelting Company did custom work as well as treating their own ores. The lead ore was shipped to lead smelters outside the Territory. A new smelter at Sasco has been completed and will treat the ores of the Imperial mine. There are plans for another at Tucson.

There were two new milling plants for Mohave County, one for Yuma, and one for Pima. Railroad building consisted in the continuation of the Arizona and California to Parker, in Yuma County, and the extension up the Gila Canyon of the Santa Fe branch from Phoenix to Winkelman, which is now owned by the Southern Pacific and will eventually connect with the main line. More than half of the total gold and one-fifth of the silver was produced by only five mines, as follows: Gold Road, Gladstone, United Verde, King of Arizona, and Congress. The Gladstone and United Verde produce copper, but the others are strictly gold and silver mines. The decrease in the gold production was decidedly due to the curtailment of the copper output during the last month of the year, since the mines which produce gold and silver alone had a prosperous year. Siliceous ore furnished nearly two-thirds of the gold, while copper ore supplied nearly one-third, placers, lead ore, and mixed ores being the sources of the remainder. In regard to silver, the copper ore was in the lead, producing more than one-half of Arizona's total. Siliceous ore produced about two-fifths, while lead ore, placers, and mixed ores contained the remainder. It is interesting to note that the average value of the gold and silver per ton of copper ore was only 56 cents, but through concentration of ore and the elimination of waste in smelting, the blister copper contains valuable amounts of gold and silver, much of which is now cheaply saved by the electrolytic method.

The value of Cochise County's metal production was not only far greater than that of any of the other counties, but was almost half the total production of the Territory. As it is the greatest copper center, there was a decrease in gold and silver in proportion to the diminution in the base metal in the last part of the year. There were small amounts of precious metals from lead ore and an important percentage from siliceous ore. The county has two large smelters at Douglas, where various improvements were made for handling a larger product. Important development work was done in the mines, which produced two-fifths of the year's copper. This county was principally responsible for the Territory's great decrease in copper, as the product was less by 15 per cent than that of the previous year.

Coconino County, which produces a low-grade copper ore containing little or no gold and silver, nearly doubled its output while hastening to take advantage of high prices.

Gila County had an unusually prosperous year, judging from a 30 per cent increase in the output of copper. The gold and silver contained in the copper ore was not of vast importance, since a million pounds of copper represents only about $3,000 in precious metal content. There was little or no placer mining and little lead or siliceous ore produced, so that Globe district, with its smelter and numerous producing mines, supplied most of the county's output. However, the Saddle Mountain Copper Company, on the Gila River, materially assisted in the total by sending matte to the Arizona Smelting Company. Development was active at Globe and several concentrators have been built.

Graham County is also famous as a copper producer and, like Gila County, has little gold or silver in the ore, a million pounds of copper representing only about $1,500 in the precious metals. This county also increased the output, but by no means to such a great extent as Gila County. There are three copper smelters in the county which were running at a record rate most of the year.

Although the Relief Mining Company, in Maricopa County, operated its mill part of the year and did an amount of development work, the county produced less gold than previously. On the other hand, some copper ore was shipped, which was not the case the year before. However, this does not mean that the county will be a regular copper producer, as the shipments were small and would probably have been impossible with normal prices.

While Mohave County was active in development work and production, there were decreases in both gold and silver, although the production of copper, lead, and zinc improved. Mohave County had 49 producing mines about equally divided between three classes: First, gold and silver; second, gold, silver, and lead; and third, gold, silver, and copper. There were eight gold and silver mines in operation during the year. The largest gold producer of the State is at Goldroads, which, according to the assessor's figures, produced more than $400,000 worth of gold and silver, the ore being treated in Huntington mills with cyanide. The Golden Gem mine became a producer and shipped a large amount of bullion, secured through the operation of four Nissen stamps and amalgamation. The lead ore from the county is shipped to Needles, Cal., where the smelter was operated the entire year.

Pima County is mainly a producer of copper, which increased as a result of shipments from forty-two properties. Many of these, however, are small producers, there being only about eight properties from which more than $2,000 worth of ore was shipped. There was some gold from placer mining, some from lead ore and siliceous ore, but the copper ore did not average a cent per ton in gold. The largest copper producer was the Imperial mine, which will have a smelter in operation in 1908. The Weldon Gold and Copper Company was the only gold producer of note in the county.

Pinal County, which is similar to Pima in kind of product, produced less gold but more silver, copper, and lead that the year preceeding. Most of the gold came from siliceous ore, while copper ore supplied 20 per cent. The largest gold producers were the Desert Queen, Mohawk, and Gold Coin. There were six large copper producers.

San Cruz County had four large shippers and seventeen small ones. There were increases in gold and copper and decreases in silver and lead. There was little gold produced, but most of it came from siliceous and lead ore. The silver came almost entirely from copper and lead ores. The Morning Glory is a new shipper of copper ore. The Duquesne was a large producer, but the ore contains little gold and silver. The Santa Cruz Mining and Smelting Company produced silver from a large tonnage of lead ore shipped to El Paso. Its lead smelter was not used.

Viewed from the standpoint of gold, Yavapai County is by far the most important. It was second in silver yield, since Cochise took the lead. In 1907 there were decreases in all metals, except zinc, amounting to more than $1,000,000. The gold was almost equally divided between copper ore and siliceous ore, while lead ore and placers supplied small amounts. The silver comes mainly from copper ore, although about one-sixth is derived from siliceous ore. The operation of the smelter at Humboldt accounts for an increase in the number of mines shipping, as many low-grade properties were unable to ship to distant plants. There were more than a hundred mines from which shipments were made in 1907, but only seventeen were of great importance. There were 5 mines which produced more than 4,000 ounces of gold: United Verde, Gladstone, Congress, Tiger, and Octave. The Lone Pine was a new producer, and the Interior Mining and Development Company operated a new mill.

Yuma County enjoyed a prosperous year, having had increases in all metals. Most of the gold was taken from siliceous ore from the King of Arizona, at Kofa, which has been a steady as well as one of the largest producers of the Territory for years. Placers and lead ore also produced some gold. Silver, however, came mainly from the copper ore, although more than one-third came from siliceous ore and some from lead ore. The Bonanza and Golden Eagle mines operated a 40-stamp mill and made a good production of bullion. There was an unusual amount of development work, and this, with favorable market, brought many small shipments to the smelters.

The mining industry in Arizona is, on the whole, in a satisfactory and prosperous condition which, owing to the forced curtailment of output during the last three months of 1907, is not adequately measured by the production of that year.

CALIFORNIA.

The production of both gold and silver in California for the calendar year 1907 shows a reduction as compared with 1906, that in the gold being quite material. This falling off in yield was rather general throughout the State and is shown in much the larger proportion of the counties. What are known as the Mother Lode counties, El Dorado, Amador, Calaveras, Tuolumne, and Mariposa, show a combined reduction in output of gold of nearly a million dollars. A few of the older mines in these counties ceased operations entirely, and in other cases labor troubles caused a closing down for several successive months, thus reducing the yield. The financial stringency during the year had also a marked effect on the gold and silver production, since numerous mines which were in the development stage and producing to some extent, but not yet profitably, were closed down for lack of funds. About three-fifths of the gold output of California continues to come from quartz mining operations, the other two-fifths being derived from placer or gravel mines of different characters. A very much smaller tonnage of siliceous ore was milled or otherwise treated in 1907 than 1906, resulting in a lessened yield by about a million and a half dollars.

The various forms of placer mining also all show a general falling off in gold yield in 1907 as compared with the previous year, the total reduction from these mines being one-half million dollars. The proportion of gold output from placers, in the different forms of mining them, was as follows: Hydraulic, 13 per cent; drift, 8 per cent; surface, 4 per cent and dredge, 74 per cent. This shows that virtually three-quarters of the placer gold is now derived from dredging operations. Even this form of placer mining, however, shows some reduction in yield in 1907 as compared with 1906, which was due to the loss or damage by floods to dredges in the Oroville field and lack of sufficient steady power in the Folsom field. In the Marysville field, where a number of new machines were at work, considerable gain in yield was manifest. As indicative of the progress in this branch of the gold-mining industry, it may be stated that a large modern dredge, with a capacity of over a quarter of a million cubic yards a month, digging in light ground to a depth of 23 to 43 feet, has made a record of operating cost of 1.93 cents per cubic yard, which is cheaper than ordinary hydraulic mining, and that has always been considered the cheapest form of gold mining. In hard ground the cost is increased up to over 3 cents a yard, and even more. Water under pressure is now thrown through nozzles in the upper part of the bank on which the dredges are working, when in hard ground, to assist in breaking down the material for the dredge buckets. There are now 60 dredges operating in California, and most of them near the Feather River at Oroville, the Yuba River at Marysville, and the American River at Folsom. Dredges are also working in Calaveras, Shasta, Mariposa, Stanislaus, Siskiyou, and Trinity counties at isolated spots. The largest number is in the Oroville field.

There are now considerably over a thousand mines in California which are producing gold, some in large amounts and some in small. The most productive county for quartz gold is Amador. Trinity County takes the lead in gold output from hydraulic mines; Placer County, for drift mines; Butte County, from dredges; and Yuba, from sluicing or surface placers. Gold is produced in 33 of the counties of the State.

As to silver, more or less comes with the gold yield from both quartz and placers, but the largest proportion is recovered in the copper-smelting operations, which are carried on to the largest extent in Shasta County. Some silver is also derived from the lead ores, the copper-lead ores, and lead-zinc ores. Silver was obtained in 32 counties of the State in 1907, though, as stated, the yield was somewhat less than in 1906.

The hydraulic-mining interests of the State continue to decline in importance. The principal seats of this industry are in Siskiyou and Trinity counties, where there are no legal restrictions requiring the miners to impound the débris. The most productive drift mines are in Placer and Sacramento counties, but this branch of gold mining does not seem to increase in importance. The surface placer yield is gradually decreasing as the deposits are worked out from year to year. The dredging industry is increasing in importance. The new machines being built are of greater capacity and much stronger and more expensive than those formerly in use. A number of new ones are being built each year, and some of the old style machines are being displaced for those of modern type. Aside from the principal dredging fields at the points where the main rivers enter the valleys from the foothills, there are a number of isolated localities where a few hundred of acres suitable for dredging have been found, and on them dredging operations have been commenced.

It is not considered at all probable that any further decline in gold output will occur in California for some years to come, but rather that there will be an increase hereafter. The earthquake of 1906 put a partial stop to prospecting and development work in almost all the counties of the State, and numerous properties closed that year were not reopened in 1907. Then the financial crisis in 1907 had its effect also in preventing investments in mines. For two years, therefore, the mining industry has languished for lack of capital in California. These conditions will not continue and mining operations are now resuming their normal conditions. Numerous mines have been reopened since the close of the year and active operations resumed upon them. New capital is also coming into California, many operators from Nevada, particularly, having made recent investments in mines. Some of the California counties are now more active than in past years as far as mining is concerned. The new smelting plants, added to the older ones in Shasta County, have caused a demand for siliceous ores so that miners may now operate their own claims without having to own reduction works, being able to sell their ores to the smelters. Altogether, the mining industry of California may be said to be in good condition, with a promise of increased yield for some years to come.

COLORADO.

The metallic production from the mines of Colorado in 1907 as compared with 1906 shows decreased quantities of gold, silver, lead, and zinc, but an increased quantity of copper.

The year opened with conditions favorable to the mining industry, with high metal prices and with mines, mills, and smelters prepared to operate at limit capacity, but there was a shortage of good miners in most of the camps. In July, 1907, the prices of silver and the base metals began to decline, and the further slump during the succeeding months was a severe blow to the silver, lead, and zinc-producing camps of Colorado. Many prominent mines were temporarily closed and at many others development work ceased, and the following money stringency still further embarrassed the operators.

Nearly nineteen-twentieths of the gold product of the State was won from siliceous or dry ores, which constituted approximately seven-tenths of the total tonnage produced from metaliferous mines in 1907, and lead, copper, zinc, copper-lead, and zinc-lead ores furnished the balance of the total, excepting a small quantity from placer mines.

Of the total silver production, siliceous or dry ores carried over thirteen-twentieths, lead ores more than one-fifth, lead-zinc ores over one-tenth, and the silver from all other sources totaled only 3 per cent.

Reviewing the precious metal production, it will be found that Teller County (Cripple Creek district), which has been the source of three-fifths of the gold product of Colorado for a number of years, made a greatly decreased output and furnished but a little more than one-half of the gold mined in the State during 1907. The scarcity of labor during the first half of the year and the burning of the large Golden Cycle cyanide mill early in August were the two chief causes of the restricted output. Most of the larger producers of the district made smaller shipments, including the great Portland mine, where much time was spent in dead work in filling old stopes and catching up ore bodies which were liable to be lost because of decaying timbers in unfilled stopes. The production of the El Paso mine was greatly reduced, as work was confined to the dry levels above the El Paso tunnel, and the Independence mine shipped much less ore, but erected a large cyanide mill at Victor to treat the low-grade ores from the mine and to mill the large dump, which was carefully sampled before the mill was started.

The starting of the Roosevelt tunnel in May was the most important event of the year, when the future production of the district is considered. Some difficulty was experienced in making satisfactory progress with the boring during the first few months, but during 1908 the work has progressed steadily.

February, 1907, witnessed the opening of the Golden Cycle mill at Colorado City, and August its destruction by fire. The company began to rebuild immediately, and by the end of the year was almost ready to begin on full capacity. In the district proper the Isabella mill, erected in 1906, ran successfully on low-grade ores. The Stratton Independence, Limited, erected a large mill at its mine above Victor, and several small nonroasting mills were operated on oxidized ores. Cripple Creek district will probably furnish a considerably increased output for 1908.

More than one-quarter of the State's gold output was won from the three principal San Juan district counties, whose combined productions were a third greater than in 1906.

Ouray County's gold total was over two and a half times as large as in 1906, largely because of the Camp Bird mine having had an uninterrupted run at its new mill. Less than two-fifths as much silver was mined in this country in 1907 as in 1906.

More gold and less silver were also won from the mines of San Miguel County, which ranks second only to Teller County in gold output, and holds the third position among the counties of Colorado in total tonnage and in quantity of silver produced. The bulk of the production of this county is derived from three large mines above Telluride in the Upper San Miguel district.

San Juan County made a slight gain in gold and a very large increase in silver production, as compared with 1906. This county is surpassed only by Lake County as a producer of copper and lead in 1907. The operations of the new Silver Lake mill and the Ross smelter at Silverton were instrumental in swelling the production during 1907.

Lake County (Leadville) produced less gold, but more silver than 1906, and was the leading county in quantity of silver, copper, lead, and zinc, and in total tons of ore mined in 1907. The silver values more than doubled the gold values, which formed only about one-eighth of the total metallic values from this county. Some of the gold from Leadville is mined as metallics, or in very high grade siliceous ores. The year 1907 opened with Leadville producing a record tonnage, but the slump in metal prices caused two of the largest properties to close down, and the year ended with the mines sending out a smaller monthly tonnage than had been shipped for several years. The increased silver product was won from dry or siliceous ores, as much smaller quantities of lead and zinc were mined. It is quite probable that the metallic production for 1908 will show another large decrease.

Pitkin County (Aspen), the second most important silver, lead, and zinc camp in the State, felt the drop in the metal prices probably more than any other camp, as the mining industry here is even more dependent upon the metal prices, inasmuch as there are no gold values in the ores. Increased activity was evidenced during the year in the smaller camps south and southeast of Aspen.

Likewise smaller quantities of gold, silver, lead, and zinc were mined in Mineral County (Creede), and some of the mines ceased shipping and began developing their ore reserves until better metal prices could be obtained.

The mines and mills of Gilpin County produced less gold and silver but more copper and lead than in 1906. The Russell Gulch district furnished most of the base metal increases. Two of the larger mines of that section completed the laterals and raises connecting the mines with the Newhouse tunnel, so that a still larger tonnage may be shipped during 1908.

The metallic production from Clear Creek County shows slightly decreased totals for all five metals in 1907. The mines in the gold belt about Idaho Springs weather the drop in metal prices, and because of increased activity of leasers shipments were continuous. In the Upper Clear Creek sections, about Silver Plume and Georgetown, the industry came almost to a standstill as far as production was concerned, as silver, lead, and zinc values predominate.

Less gold from placer mines and from siliceous ores resulted in a smaller gold output from Summit County during 1907, but lead ores and lead-zinc ores furnished increased silver totals as compared with 1906. The installation of electric power for mining purposes and the building of two large dredges during 1907 will result in an increased gold output in 1908.

Chaffee County's mines saved more gold from the placer mines at Granite and from copper and lead ores in 1907 in the Turret and Chalk Creek districts, respectively, but decreased shipments of argentiferous lead and lead-zinc from the Monarch district resulted in a smaller silver product than in 1906. In 1907 the total value of the base metals was over five times as large as the precious-metal totals in Chaffee County.

Park County made a large increase in gold output from deep mines, but the placer product fell off considerably below the 1906 totals and less silver was mined.

The placer mines of Routt County furnished only about two-thirds as much bullion as in 1906. The building of double tracks through the Eagle River Cañon interfered with shipments from some of the mines of Eagle County. Much smaller productions were made from the mines of Gunnison and Hinsdale counties, the precious-metal values decreasing about one-half in each county.

The smelters in Colorado were able to operate at full capacity till well on toward the end of the year on stocks of ore on hand, but by the first of 1908 the decreased shipments from the mines made it necessary to place a number of furnaces temporarily out of commission.

Operations up to the middle of 1908, with the continued unsatisfactory prices of metals, would indicate a decreased production of all metals except gold in 1908.

IDAHO.

There was unusual activity in mining throughout Idaho in 1907, due to the high prices paid for all metals. An extremely productive year was anticipated, but the output fell below the average on account of the depressing financial conditions during the last three months of the year. The State had three smelters in operation during the year. One at Mackay operated continuously on ores from the property of the Empire Copper Company, one at Ivers ran about a month, making a rich matte from Lost Packer ore, and one at Ponderay operated a short time, treating custom ore. Nearly all Idaho's ore is shipped to plants in other States. The work on the railroad, which will make Murray an important shipping point, is progressing rapidly. A line connecting Salmon, in Lemhi County, with points in Montana is being surveyed. A branch of the Oregon Short Line from Lewiston to Huntington is under construction, and the Spokane International, from Spokane through Bonner County, in the northern part of the State, is nearly completed.

There was an increase in the State's gold output, due to placer and quartz mining, but a decrease in the production of silver on account of the effect of the panic on the output of silver-lead ores. Forty-six per cent of the gold was secured through the operation of gold and silver mills, of which there are fifty-seven in the State. The remainder was secured from ores and concentrates smelted and from placer operations. There were six active dredges, the three most important ones being at Pierce, Placerville, and Salmon. Gold increased from placers, siliceous ores, copper ore, and lead ore, as well as from mixed ores. More than half the gold is taken from siliceous ores, nearly one-third from placers, about one-tenth from copper ore, and only about 5 per cent from lead ore. The latter ore, however, is credited with over 80 per cent of the State's silver output, most of which came from the Coeur d'Alene region, while the remainder came from Blaine and Lemhi counties. Siliceous ore contained 10 per cent and copper ore nearly 7 per cent. The lead-zinc ore from the Success and Frisco mines supplied 3 per cent. Silver decreased in copper ore and lead ore, but increased from siliceous ore and lead-zinc ore.

While production was not unusual in Ada County, there was steady development work on many promising properties. A company was organized at Boise to test ores of the surrounding districts by a cyanide method which has new features.

Bannock and Bear Lake counties reported no production of importance, but continued development work.

Bingham County reported only test shipments of copper ore and some gold from Snake River.

More than two-thirds of the gold from Boise County was secured through placer operations, favored by a good water supply. Hydraulicking is the method employed in most cases, but there is one dredge at Placerville, which has been successfully operated for several years. Nearly 20 per cent of the State's gold was taken from this county. There was a decrease in gold from deep mines since the old producers in Boise Basin were either idle or merely produced small amounts. At Pearl the principal producers were the Lincoln and Black Pearl.

The most interesting features of Blaine County's mining industry during the year were the development and production of the Crœsus mine and the improvements at the plant on the Idaho Consolidated property. The former shipped two products, the one a silver-lead and the other an iron-sulphide concentrate containing much gold. Bullion is also secured from the gold ore, which is partly free milling. The Idaho Consolidated Mines Company, which owns the famous Minnie Moore mine and other property near Bellevue, is doing important work on the Relief claim, and has installed a 250-ton mill, which uses both wet and dry concentrates. There are many regular producers in the county, and, judging from the active development work, there will be a larger production in the near future.

Bonner County made small shipments of lead ore and silver ore from points on Lake Pend d'Oreille to the Panhandle smelter. Several properties around Priest Lake are being developed.

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Canyon, Kootenai, Latah, Lincoln, Oneida, and Twin Falls counties merely produced small amounts of placer gold.

Cassia County also produced placer gold from Snake River and some lead ore from the Cumora mine, which is reported to have a large amount of ore awaiting a mill.

Custer County has two copper-matting plants, the one belonging to the Empire Copper Company, which successfully operated on the low-grade ores of the White Knob mine, and the Lost Packer, at Ivers, which produced matte unusually rich in gold and silver. Gold was also derived from a dredge in Stanley Basin and from quartz properties, the chief of which is the United Sunbeam mine.

A large production is expected from Elmore County when the well-equipped mills of the Bagdad Chase Gold Mining Company and of the Atlanta mines at Atlanta are in operation. The principal producers were the mines of the C. H. Gold Mines Company, in the Pine Grove district; the Minerva, at Atlanta, and the Homestake and Mountaineer, at Neal.

Fremont County produces small amounts of gold and silver from copper ore shipped by the Weimer Copper Company.

Although Idaho County produced less gold and silver in 1907 than during the previous year, there was unusual activity at Elk City, where the Buster mine reached the bullion-producing stage. With the exception of the Dewey mine and mill, the Thunder Mountain district failed to disclose any producers, but energetic development progressed in the Marshall Lake district. Three-fifths of the county's gold is derived from placers at Elk City, Resort, Newsome, and along Salmon River.

Lemhi County's gold came principally from placers and siliceous ore, while most of the silver is derived from lead ores. There was a decrease in gold, but an increase in other metals. The Mullan Dredge, on Moose Creek, was successfully operated and the Bohannon Bar placer made a large clean up. The Union Pacific and Burlington made initial shipments of bullion during the year. Other mines producing bullion were the Oro Cache, Rabbit Foot, A. D. and M., Kittie Burton, and Tin Doy. Regular shipments of silver-lead ore were made by the Pittsburg-Idaho property, at Gilmore, and small shipments by the Lemhi Union and Junction Mines Company. The Parker Mining Company shipped some ore rich in gold and silver, and contemplates a mill. The Copper Queen Mining and Smelting Company did interesting development work, disclosing gold deposits as well as copper ore.

There was a falling off in the production from deep mines in Nez Perce County, but much work done in placering. The dredge of the Idaho Company operated the entire season and shipped bullion regularly to the mint. The Ruble elevator, a new device for handling gravel, is being installed on several properties.

In Owyhee County the De Lamar and Trade Dollar mines continue to produce most of the output of gold and silver. The American Standard made a shipment of silver-lead ore and the Sunnyside operated its mill-producing bullion. The Potosi and Banner mines are expected to add materially to the county's wealth.

About 90 per cent of the value of Idaho's production was derived from that portion around Wallace, called the Coeur d'Alene district, which would have made a record for 1907 had it not been for the panic. As it was, there were decreases in gold, silver, and lead. The gold was derived from placers at Murray, from the copper ores of the Snowstorm and Monitor mines, from the antimony from the Stanley mine and from lead concentrates, which average in the neighborhood of 50 cents per ton. Silver was largely derived from lead ore, which contains as much as 60 ounces to the ton. The copper ores and the lead-zinc ores from the Frisco and Success also contain important amounts of silver. The lead ore contained over 90 per cent of the county's silver. While no new mines entered the shipping class in 1907 there was much development work accomplished and improvements made in mechanical devices. Electricity was used to a greater extent, systems of ore sorting improved, and efforts made to save the valuable portions of the tailings. The Frisco and Success shipped immense quantities of zinc concentrates. The Murray camp will greatly assist in the district's production when the Idaho Northern is completed.

There was much development, but little shipping from Washington County during the year, but the Peacock is expected to ship regularly in the future, and other properties will become shippers when the railroad from Lewiston, Idaho, to Huntington, Oreg., is completed.

It can readily be seen that Idaho is in a most favorable condition for future mining operations.

MONTANA.

The high metal price in 1906 had stimulated the mining industry of Montana to a high degree of activity. The year 1907 opened under the influence of rising prices, and the mines were working under high pressure until September. During that month the rapidly falling price of copper caused most of the Butte mines of the Amalgamated Copper Company to restrict their output. The financial panic of October, 1907, had the effect of closing the smelters, or at least greatly restricting their output. Early in December the Washoe smelter was closed. The smelter at Great Falls, which also belongs to the Amalgamated Company, continued in operation to the end of the year. The East Helena lead smelter, of the American Smelting and Refining Company, refused to accept ore except from mining companies with which contracts had previously been made. A great number of mining companies in various parts of the State were forced to close from lack of ready money, and there was little relief from these conditions up to the end of the year. An interesting feature is that the adverse conditions in deep mining caused an increase in the output of the placer mines. Many operations of such kind were started by miners who had been discharged from employment in the metal mines.

The result of the prevailing conditions was a decrease in the yield of gold and silver which amounted to about $1,000,000 in gold and somewhat over 1,000,000 ounces in silver. The full effect is not reflected in these figures, for it must be remembered that the refining process always lags behind the smelting process and that consequently the refineries kept on producing gold and silver for a considerable time after the closing of the smelter.

The output of placer gold was approximately $340,000. As usual, Madison County far exceeds any of the others in the yield, the gold being chiefly derived from the dredges in Alder Gulch. Lewis and Clark, Missoula, and Powell counties also contribute a considerable amount.

The gold from siliceous ores amounts to about $2,000,000 in 1907. As usual, Fergus County is in the lead, but the production decreased somewhat compared wth 1906. The gold ores, which are treated by the cyanide process, are found in the Judith and the North Moccasin mountains. The mines of Jefferson and Lewis and Clark counties are next in importance. A considerable amount of gold was also produced in the recently opened mining district in the Little Rocky Mountains, in Chouteau County, situated about 55 miles south of the station of Mala, on the Great Northern Railway. The ores are cyanided.

The copper ores yielded somewhat over $600,000, which, as usual, was principally derived from Silver Bow County. This production shows a considerable reduction from the figures of 1906. The only other district which produces gold from copper ores in notable quantity is the Hellgate, in Broadwater County. A small amount of gold is obtained from lead ore, and this is chiefly contributed by a number of smaller mines in Lewis and Clark County.

The silver produced in Montana is very largely derived from copper ores of Butte, Silver Bow County. The production from this source was notably smaller in 1907 than in 1906. Of the total production of silver in Montana, amounting to 11,129,600 fine ounces, about 75 per cent came from this source. The lead ores from Cascade, Jefferson, Lewis and Clark, Beaverhead, and Granite counties yielded some silver, the output in each county not exceeding 100,000 ounces.

A relative large portion of silver is derived from siliceous ores. In the past most of this has always been derived from Granite County, where the Granite-Bimetallic and other important silver mines are located. This year, however, Jefferson County made a larger output of silver from this source, and most of it came from the mines in the Elkhorn district. Silver Bow and Cascade counties also add somewhat to the production of silver from siliceous ores.

The East Helena smelter still remains the only lead smelting plant in Montana. The capacity of the Washoe smelter at Anaconda was increased during the latter part of the year, when the operations suspended, up to approximately 11,000 tons per day. It was planned to increased the capacity of the Boston and Montana smelter to approximately 8,000 tons per day. Many improvements were also made at the Butte reduction works, including the construction of a 700-ton concentrator. The total capacity of the concentrating plant is now 1,200 tons in twenty-four hours, or about equal to that of the smelting works. The mines at Butte have now attained a depth of 2,700 feet in the Anaconda shaft, and the water is now pumped from a sump sunk 85 feet below this level.

NEVADA.

The increase of gold and silver yield in Nevada in 1907 over 1906, although amounting to nearly $2,000,000, was not as large as had been expected in view of the attention which the State was attracting from its numerous new mining camps and the high grade of the ore being shipped from leading mines. Nearly 70 per cent of the gold yield came from the single camp of Goldfield, Esmeralda County, the largest source being siliceous ore. The increase in silver output for the year was not very large. The yield was mainly derived from siliceous ores, though some came from lead and lead-copper ores. The most important point of silver production was Tonopah, Nye County. There are about 230 producing mines of all kinds in the State, and a very large number of mines which have as yet made no record of yield. During the earlier part of the year 1907 there were large numbers of mines under development in the various camps, many of which were compelled to stop operations when the financial stringency arose later in the year. A good many of these are still idle, and in 1908 there was much less mining activity throughout the State than was the case in the preceding year. The high transportation rates and smelting charges combined permitted only the richer mines to continue work in a country where there are few reduction plants for individual properties. But these charges have ultimately led to a desire on the part of the larger companies to own their reduction plants, and several of these, of quite extensive capacity, have lately been built, while others are planned.

In view of the excessive charges also, much ore already mined was withheld from shipment until smelting costs were reduced or new railroads would bring about competitive rates. The shipping of ore to smelters, for a time unversally done, is being avoided where possible.

The gradual cutting out of the leasing system by the larger productive companies, which are now more generally working the mines on their own account, is also to some extent responsible for lessened shipments to smelters. The leasers, owning no reduction plant, were compelled to ship, while the companies that have provided reduction plants can work their own ores. The grade of ore now being mined is also lower than when the mining was done by leasers, who had worked only the richer ores, for the mines are now worked more systematically and the lower grades of ore are extracted along with the richer.

It may be said generally that those mining camps within reasonable distance of railroads in Nevada have made more or less progress, while those without such facilities have languished or become partly deserted. In the desert regions of southwestern Nevada, where most of the newer districts are located, unless very high-grade ore can be mined, little or no profit can be made under present conditions. Of course, where companies are able to treat their own ore, without having to ship it, these conditions are modified. In connection with the decline in average value of the ore, it is worthy of note that the legitimate concerns engaged in active mining are giving less attention to the mining-stock features than formerly, and are adopting more economical systems in both mining and treating their ores.

Some of the widely advertised camps, the maps of which show hundreds of locations and whose mines are or were prominent in the mining share markets, have still to prove their permanence and the actual values of the properties. The financial stringency of 1907 caused an abrupt stoppage of work in several of these camps before they had a chance to make any product, and it will now be difficult to draw attention to them again except through the medium of actual bullion output.

Several railroads benefiting the mining camps of Nevada were completed in 1907 and others are being built. Along the line of each of these more or less work is being carried on in the various neighboring camps. Since many of these districts are comparatively new, very deep development work is not common, although the miners are sanguine of creating other Goldfields or Tonopahs. Still, south of these two important camps, most of the districts were in an inactive condition generally for many months after the financial crisis.

The present conditions in the mining industry in Nevada are quite different from what they were a few years ago. There is now more attention to actual mining and less to stock jobbing, though there is yet considerable reliance on the latter feature. In the proven camps, however, where there are several producers and numbers of other active properties, mining work is being carried on upon legitimate lines. Numbers of the mines have been proven "permanent" ones, are yielding profitable ore, and are being properly developed. The self-supporting camps are doing well and have extended the mining field of the State, to its great benefit.

Numerous speculative camps, or districts, have still to prove their worth, and this can only be done by actual development work in the more favorable properties. At one time it was difficult to even keep track of the new districts, so many were there and so rapidly were their discoveries reported. In time, however, those with real merit came to the front, while the doubtful ones remain in the background.

Nevada continues to be the most favorable field for prospecting in the Pacific Coast States, though there are by no means so many men in the various districts as has been the case in the past few years. The trend of recent discoveries has been toward the southwest and across the borders of California into Inyo and San Bernardino counties, in the latter State. It is also the case, however, that numbers of the old districts in Nevada are being reopened and more thoroughly prospected. Some of these have been virtually abandoned for twenty or thirty years. When formerly worked, the costs of mining and treating the ores were much higher than at present and there were no railroads. Under the present conditions mines then valueless can be profitably worked, and for this reason many in the older districts are being reopened and reduction works are being provided for them. This has brought about a revival in old districts that have been scarcely heard of for years.

In 1907 production was made to greater or less extent in the following mining districts: Churchill County, Fairview, Wonder, and Stillwater districts; Douglas County, Buckskin and Silver Lake; Elko County, Aura, Edgemont, Mountain City, Bullion, Spruce, and Tacoma; Esmeralda County, Aurora, Buena Vista, Goldfield, Hawthorne, Buckley, Lida, Hornsilver, Luning, Candelaria, Mina, Pine Grove, Silver Peak, and Thorp; Eureka County, Eureka, Cortez, and

Palisade; Humboldt County, Fitting, Golconda, Mills City, Winnemucca, Humboldt House, and Seven Troughs; Lander County, Austin, Bullion, and Copper Basin; Lincoln County, Caliente, Delamar, Crescent, El Dorado Canyon, Fay, Los Vegas, Pioche, Yellow Pine, and Searchlight; Lyon County, Dayton, Ramsey, Silver City, and Yerington; Nye County, Bellehelen, Berlin, Marble, Bullfrog, Goldyke, Round Mountain, Manhattan, Silver Bow, and Tonopah; Storey County, Comstock; Washoe County, Peavine, Olinghouse, and Washoe; White Pine County, Aurum, Black Horse, Osceola, Cherokee, Ely, McGill, Newark, and Hamilton.

NEW MEXICO.

The mines of New Mexico made substantial increases in the production of precious metals in 1907 over the two preceding years. The gold increase was largely due to greater activity in the mining of copper in the Territory in 1907, when the price of this metal was so high. Thus, the gold was recovered as a by-product. This was particularly true in Grant, Otero, and Santa Fe counties, where local smelters were operated on gold and silver bearing copper ores from adjacent territory. Though more than 75 per cent of the gold produced in New Mexico in 1907 was mined in siliceous ores, there was a decreased output from this class of ore. The gold from copper and lead ores increased several times over.

The gold won from placer mines was equal to about three-quarters of the 1906 placer output, which, in turn, was far below the normal yield of this class of mines in New Mexico.

The silver production in 1907 was almost one-half as large again as in 1906, and the entire increase was won from siliceous ores. The total value of the silver mined in the Territory, figured at the average market price for 1907, was over one-third larger than the total value of the gold recovered.

Gold and silver were mined in twelve out of the thirteen counties making a mineral production in 1907. There was a large increase in the number of producing mines in the Territory, owing to the operating of many small prospects, from which shipments were made, while the metal prices permitted the shipping of low-grade ores.

Considering the source of the metal production by counties according to the total value of the precious-metal output in 1907, it will be found that Socorro County ranks first in the combined yield. Approximately three-fifths of the silver production and almost a third of the gold output of the Territory were won from siliceous ores mined in the Mogollon Mountains, in the southwest corner of the county. There was an increased tonnage of siliceous ores, from which 50 per cent more silver was produced in 1907, but the gold savings from this district were smaller than in 1906.

Grant County ranked second as a producer of precious metals, but held first place as a source of gold. Greater quantities of both metals were mined in this county in connection with a record copper production in 1907. There was a large increase of copper-bearing siliceous ores, which furnished nearly all the gold and a greater part of the silver output of this county. Some silver was won from copper and lead ores. As a mining county Grant easily ranks as the foremost in the Territory, since its copper output alone is equivalent in value to the combined metal production of all the other counties in the Territory. In addition, a large quantity of iron is mined in this county. The mine production in 1907 was augmented by the operation of a smelter at Silver City during the greater portion of the year.

Lincoln County made the third largest gold output in 1907. The siliceous ore mined here furnished more than twice as much gold, but only about one-third as much silver as in 1906. Increased productions in all of the districts of this county, but more especially in the Bonita and the Whiteoaks sections, were made in 1907.

For the past few years the precious metal output of Santa Fe County had been restricted to small placer operations about Golden, until early in 1907, when the Santa Fe Gold and Copper Company renewed operations at its smelter at San Pedro. The gold and silver values contained in the copper ores reduced while the furnace was being operated in 1907, placed Santa Fe County in the fourth place as a precious metal mining county, and made it second only to Grant County as a source of copper.

The gold output of Luna County made a large increase in 1907 over the production of 1906, while less silver was recovered. Lead ores furnish the entire precious metal product of Luna County, which ranks second only to Grant County as a producer of lead. The Cook's Peak section was the most active and furnished most of the shipments.

A little less silver was mined in copper and in lead ores in 1907 in Doña Aña County, but the copper output was much larger than in 1906.

The very great increases made in the output of both gold and silver from the mines of Otero County were due to the greater quantities of copper ores mined in the Silver Hill district and shipped to the new copper smelter of the Southwest Smelting and Refining Company at Oro Grande. This plant started to produce matte early in November, 1907, after spending several years developing its mines and erecting the smelter.

In Colfax County, in 1907, placer mines furnished the entire precious metal output, which was slightly smaller than in 1906, and resulted from small operations by individuals, but no company work was done.

Sierra County dropped from third to ninth position among the counties as a producer of precious metals, as both the deep mines and the placers furnished less gold and silver than in former years.

SYLVANITE, NEW MEXICO.

By G. A. MARTIN.

[From The Engineering and Mining Journal, New York, November 14, 1908.]

The latest mining excitement is found in the new camp of Sylvanite, New Mexico. The district is in a barren region in the Big Hatchet Mountains in Grant County, in the southwestern part of the Territory. It is 117 miles west of El Paso and is 17 miles from the nearest point on El Paso and Southwestern railroad.

THE ORES OF SYLVANITE.

Samples of the ores have been assayed in El Paso, Arizona, and Colorado, and all have carried high values. Some have run as high as 216 to 300 ounces of gold to the ton, with considerable silver. There has been much controversy as to the character of the ore, but the assayers and experts generally have come to the conclusion that it is not sylvanite, although they admit that it is very rich. At first the ore was declared to be sylvanite, similar to the ores of Cripple Creek district, but A. W. Houck, of El Paso, differed from this conclusion, and he has now been sustained by such men as F. C. Earle, manager of the El Paso smelter of the American Smelting and Refining Company, O. A. Critchett, John A. Rice, and several other experts of wide experience. Mr. Earle says that he tested the ore for tellurium and ascertained that it contained tellurium but that it gives a strong bismuth reaction. The metal which he tested is of a white substance and he is satisfied that it contains gold, tellurium, and bismuth, but he is not yet able to name the mineral. He is inclined to think that it is a telluride of bismuth, carrying gold and that, since tellurium and gold have a strong affinity, part of the gold may be combined chemically and part may be free even within the structure of the telluride of bismuth. Both John A. Rice and O. A. Critchett declare that the ore is not sylvanite, but a tradymite or telluride of bismuth.

REACHING THE CAMP.

As already stated, the camp is 17 miles from a railroad, the nearest station being Hachito on El Paso and Southwestern Railroad. The trail from this point to Sylvanite can hardly be called a road, and would not be traversed except that it leads to the promised wealth at the gold camp. Thus far all the vehicles in that sparsely settled country have been pressed into service to haul passengers into the camp, and it has been impossible to get any freighting done. Supplies are piled up at the station of Hachita, food and bedding, while miners, prospectors, and other inhabitants of the camp suffer from want of food and shiver in the cold at night.

Two automobiles were brought overland from Douglas, Ariz., over 100 miles, and put into the passenger-carrying business. Their owners were operating on the streets of Douglas, but when the gold excitement broke out they set out across the desert and are now hauling passengers at $5 a head between Hachita and Sylvanite and making more money in a day than they made in a month in Douglas in ordinary traffic. The transportation situation, however, will not be relieved entirely, if the new camp is all that is expected of it, until a branch can be built from the main line of the railroad. Officials of the road have been investigating the situation with the idea of relieving it as soon as the wealth of the camp is definitely determined.

The first discovery of a gold-bearing ore was made by Sol. Camp, a prospector and old-time Cripple Creek miner. The news spread rapidly, and within ten days nearly 1,000 people had reached the place.

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OREGON.

Both quartz and placer mines in Oregon show a decreased yield of gold in 1907, though there is apparently a nominal increase in silver. The largest gold yield continues to come from Baker County, from both quartz and placer mines. The dredging, drift, and surface placer mines of the State show some increase in output of gold, though the yield from hydraulic properties was lessened as compared with the previous year. In 1907 there were two dredgers in operation in Oregon. The decrease in the amount of siliceous ore mined and milled accounts for the falling off of gold yield for the year 1907, although, as stated, there was also some loss in placer yield as compared with the year 1906. The milling ores of the State, including the concentrates, averaged $7.33 per ton, gold, and 47 cents silver, per ton. The larger proportion of the silver was derived from the siliceous ores of Baker County, there being very little of this metal obtained in those ores in the other counties, or from placer mines, or copper ores. The water season in Oregon in 1907 was a poor one, and numbers of mines were idle which were formerly productive.

There are upward of 200 productive mines of various classes in the State and, although 14 counties show a mineral yield, over half of the whole output was from Baker County. This county increased its tonnage of ores, and its placer yield was also much larger than in 1906. Some of the larger properties, like the United Elkhorn and the Eureka and Excelsior mines, were entirely idle in 1907. A new mill and concentrator are being built at Sparta, and there is now a large concentrating mill at Quartzburg in Grant County. In the same county a large cyanide plant has been installed and a pyritic matte plant has been finished. The Greenback Mining Company has built a large reduction plant. An electric power plant to furnish several mines has been installed at Sanger.

In addition to the producing mines in Oregon there are some which, while nonproductive, are in process of development, but the numbers of idle mines continues to be quite large. Most of these are held by annual assessment work only, awaiting the advent of capital to assist in their development. A few placers are being worked on the ocean beaches of the State, but the gold yield from this source is small.

PHILIPPINE ISLANDS.

The Philippine Islands figured in the gold production of the United States, Territories, and dependencies for the first time in this year's report. The amount of gold recovered during the possession of the islands by the United States up to 1907 was too small to attract any special attention; but this year the result of investigation and development work of the mining sections of the islands, which had been going on for some time previous, began to show itself in a yield of over $64,000. The islands have been producers of gold for many years, old government records showing that in the seventeenth century there was an annual output of about $200,000 for a time. The greater part of this gold was recovered from lodes, which are thought to have been worked only a little below the water level. A correspondent of the London Mining Journal, dated August 23, 1908, says that these old workings can be traced for miles in the vicinity of Mambualo. According to this same authority, the greatest development in gold production in the islands will ensue through the introduction of the dredge system of mining. Reports have been published that there is a large section of ideal dredging ground on and adjacent to the Paracale River, and that one dredge at work on this river in the month of July, 1908, extracted 470 ounces of gold. The introduction of several dredges is contemplated, the ground having been tested and surveyed with this end in view. One company alone, having an option of 3,000 acres, will install ten dredgers if the tests of the ground prove satisfactory. The bedrock is said to consist of a soft, decomposed gneiss. The Paracale district is on the eastern coast of the island of Luzon, and is estimated to be something like 5 miles wide and 10 miles long.

METALLIC MINERAL RESOURCES.

By Maurice Goodman.

[From The Mineral Resources of the Philippine Islands, issued by Warren D. Smith, Chief of the Division of Geology and Mines, Bureau of Science.]

Gold.—Gold is easily the first in importance of the metallic mineral resources of the Philippines. It has been sought for and found in most of the provinces of the archipelago, but of them all the provinces of Benguet, Masbate, and Ambos Camarines are rivals for the first place in the metal output and in general mining activity. Numerous claims have been located in these provinces and several corporations have lately been organized to develop and operate a number of the most important groups. The success of some of the companies which have entered the field is yet in doubt, whilst that of the others, to judge from their continuous operation and constant output, might naturally be considered assured. There are other corporations which have not yet attempted to break into the producer class, but have exerted their energies toward developing their properties and blocking out ore. From the latter class good reports are anticipated in the near future. As the mineral resources of the Philippines have been discussed at length in the past annual reports of the chief of the mining bureau, copies of which may be obtained upon application, it will be necessary here to make mention of the later discoveries and developments only.

Two new stamp mills have recently been imported into the islands. One, a Hendy quadruple-discharge 6-stamp mill of the Risdon type, has been set up in Masbate. On the other hand, a 10 and 5 stamp mill have been shut down in Masbate, so that the prospects for an increased output this year seem doubtful. However, new discoveries have been made which promise well for the future. At Binanlonan, in the northern part of Pangasinan, some rich but narrow veins of free-milling ore have been discovered, and at least two companies are engaged in active exploration work in that field. Unfortunately, internal dissensions have been interfering with rapid progress in this district, but with the settlement of disputes the outlook for the new mining camp seems favorable.

The island of Marinduque also offers a new but small field for the prospector. Recent discoveries conclusively prove the presence of gold-bearing veins, and while no bonanzas have been encountered the company most active in prospecting the district declares itself well satisfied with the showing thus far made and is prepared, should the prospects continue favorable, to open up and develop its properties on a large scale.

The gold-mining industry in the northern Camarines has been showing signs of awakened interest. While this is more true of placer than of quartz properties, the latter, too, have recently been the subject of negotiations which have been successfully concluded, and mining operations here have been resumed. These properties are reported to have yielded much rich ore in the past, and were the only mines operated with an approach to modern methods during the Spanish régime. For various reasons these mines were abandoned and are to-day in such a condition that it will require a considerable expenditure of money to put them in working shape.

The most recent information received is that the dredge erected about May 1 of last year is yielding returns, and several quartz prospects are being opened up.

The most interesting and probably most important of the recent discoveries of gold was made in the Suyoc region of southern Lepanto, where the Igorots have been working and washing gold ore by the most primitive methods for a hundred years or more. Many years ago they were driven out of their richest diggings by water, as, because of the topography of the country, they could not work these places by their usual booming method. An American prospector, by means of a drainage tunnel, has recently removed the water from one of these flooded workings and found the rich ore which tradition reported to be present.

A silvery white mineral, since identified as calverite, was observed in association with the free gold, this being the first authentic report of the occurrence of telluride of gold in the Philippines. No report as to the extent of the deposit or the average assay value of the ore has yet been made.

No great amount of bullion was produced during the past year from the placer deposits of the Philippines. One dredge has but recently arrived at its real working field, having been engaged heretofore in laboriously making its way through comparatively poor and more or less barren ground. A New Zealand syndicate imported a gold dredge last year which has since been put together and floated in the Paracale River. Another dredge, which is now lying idle in Masbate, may be transferred to the Camarines in the near future to assist in the exploitation of this rich field.

In Nueva Ecija ditches and flumes have been constructed and everything is prepared for a profitable sluicing campaign during the coming rainy season. Considerable prospecting has been done during the past year in the placer field of northern Surigao, but no extensive mining operations have yet been undertaken.

Silver.—Native silver has been obtained only from one of the Suyoc mines, a short distance from where the telluride of gold was discovered. Some rich assays of this ore have been made. As an associate of gold it is encountered in many ores, but in most of them it occurs only in inappreciable quantities. It has been found with lead in the argentiferous galena of Marinduque and Cebu, running over 11 ounces per ton in the former, while in the latter the proportion is unknown, although it is reported to be high.

Lead.—No development work was performed on any of the lead deposits of the Philippines during the last year. The outcrops in Marinduque and Cebu were visited by representatives of the mining division of this bureau, but the lack of development work made it impossible to formulate a conclusive report upon the probable importance of these deposits. A few of the gold ores of the islands contain a sufficiently high percentage of galena to make it a factor in the estimation of the smelting cost. Large specimens of galena float were found in conjunction with those of chalcocite mentioned above, but as already stated, the parent lode of these bowlders has not yet been discovered. In Cebu the galena occurs as a "stockwork" in or closely associated with an andesite flow.

STATISTICS.

Compiled by W. D. Smith.

Production of Gold and Silver, by Provinces, in 1907.

Province.	Gold.	Silver.
	Ounces.	*Ounces.*
Ambos Camarines	100	7
Benguet	[a] 3,888	....
Lepanto-Bontoc	....	([b])
Sorsogon (Masbate)	552	76
Total	[c] 4,540	83

[a] About 200 ounces per month are brought in by the Igorots and sold in Baguio. The output of the American mines is given in dollars from which the number of ounces was calculated.

[b] Some silver ore has been found, but has not yet been developed.

[c] I have estimated the total Igorot production to be 2,000 ounces. It is impossible at present to obtain more exact figures.

Of the 4,540 ounces of gold which, from actual figures and estimates, make up the total, 2,540 represent the amount taken out by Americans and New Zealanders, the remainder represents the quantity mined by hundreds of Igorots and sold in Baguio. The average fineness of the gold taken out by the American and New Zealand operators was 0.850.

Some of the Igorot gold recovered as nuggets and stringers would doubtless be finer, but a certain proportion of their gold has been found to be alloyed with copper to such an extent that an ounce would not be worth more than $10. It is to be regretted that our figures can not be more definite, but this is our first attempt at compiling statistics in the Philippines.

When it is remembered that the Igorots use no machinery and all the other gold, excepting that which came from one dredge set up last May, has come from two stamp mills of 3 and 10 stamps, respectively, which latter have been set up hardly more than a year, and when it is recalled that all the properties are as yet doing little more than development work, the outlook is encouraging. Silver is as yet practically a negligible quantity.

SUMMARY OF THE CHIEF CHARACTERISTICS OF PHILIPPINE ORES.

By WARREN D. SMITH.

Up to this time very little has been said concerning the character of Philippine ores, if we except scattered notes and reports. One reason for this is that even now very little is known. In order to present the question in concrete form, I shall briefly state some of the more important features connected with Philippine ore deposits as we now know them. The chief copper ores are those of Lepanto, Luzon. They are sulpharsenates. There appear to be no appreciable amount of sulphides in the workings so far as can be ascertained at the present time. There are indications that the enargite is due to secondary enrichment.

The veins are more or less irregular. The chief gangue mineral is quartz. The gold which comes from this region is probably associated with pyrite, which is present in greater or less quantity. The veins are thought to be due to contraction in the cooling mass of trachyte, where they are now found, and they are not considered to be typical fissure veins.

The gold ores in the Benguet region are partially free-milling, but for the most part refractory. The cyanide process is being used at one mine, but there are certain local features which will necessitate slight modifications to suit special conditions. One trouble experienced in amalgamation in both Benguet and Masbate is the presence of oxides of manganese. These cause no inconsiderable annoyance.

The ore relations in both Benguet and Lepanto point to deposition from ascending water, and in Benguet several promising properties are located along the contact between the basalt diorite and the andesitic extrusives. It is fully expected that future geologic work in the district will establish some definite relations which will be of very practical value to the mining men. In Benguet no system of fissuring has so far been worked out and this will be one of the first features of the work to be undertaken there.

However, in Masbate a very regular series of parallel fissure veins has been noted and these are now being mapped on an accurate topographic map. These veins have a northwest and southeast course across the country. They are generally faulted along one content. Brecciation and later mineralization have been noted as quite common in the district.

We have in the Philippines great quantities of black sand, which is found to contain hornblende, pyroxene, magnetite, ilmenite, rutile, platinum in small quantities, and not inconsiderable percentages of gold. The gold is free, but in so finely divided a state that the method of recovery will be largely a physical one. Experiments are now being carried on here by the chemical division, and in the field some New Zealand operators are studying this material.

Tellurium was identified by this division some time ago. It is said by a reputable engineer of Benguet Province to occur in the characteristic form which it assumes in Colorado; that is, in fine streaks and stringers, irregular in the gangue. There does not seem as yet to be any very important development of this mineral. It is very interesting to note that just adjoining the telluride zone, which is of very limited dimensions, a 2-foot vein of ore assaying as high as $50 to the ton has been observed on one claim.

Silver in particularly noteworthy quantity has not yet been found. Although some free silver is reported from Lepanto, most of the metal which was known in Spanish days came from argentiferous galena.

These are the bald statements of the facts as we now know them. It would be decidedly premature to discuss them more in detail in the present state of of our knowledge of the field and its problems.

SOUTH DAKOTA.

A review of the year 1907 records many misfortunes to the mining industry in South Dakota, which reduced the year's production to less than two-thirds of that of 1906. The placer output also shows a large decrease from that of the previous year.

The miners and millmen demanded an eight-hour day at the beginning of 1907, and the resultant strike caused seven of the larger producers (excluding the Homestake) to remain idle for periods ranging from five to nine months. The Homestake Mining Company (which produces more than three-quarters of the precious metal output of South Dakota each year) settled upon the eight-hour schedule, but suffered a serious misfortune when, during the last week in March, a fire started in the mine, soon getting beyond control, and it became necessary to flood the workings in order to subdue it. This caused the mills to close on account of lack of water, until the fire was extinguished, when the stamps began dropping on surface ores until the mine had been unwatered sufficiently to begin supplying ore to the mills. During the year the remaining presses were put into commission at the slimes plant, so that the prospects for a record production from this mine in 1908 are very bright.

In Custer and Pennington counties the production fell off very materially and there was a diminished amount of development work done. Litigation prevented two of the most prominent mines of Pennington County being operated.

A large number of new or remodeled mills were placed in commission during 1907, which ought to substantially increase the bullion output for 1908. There was a further extension of the use of electric power by the various mines and mills, and a new hydro-electric plant at Spearfish began to distribute power to concerns in that vicinity.

The Black Hills were without an active smelting plant in 1907, the National smelter at Rapid City having closed down when the Mogul Mining Company finished remodeling its own cyanide mill at Pluma and began to treat its own ores.

UTAH.

In Utah during 1907 there was treated the largest tonnage of ore ever handled and more copper was produced than in any previous year, but there were decreases in all other metals. The last six years have shown that as the tonnage has increased the average value per ton in gold and silver has decreased. This is due to mines working the low-grade ores of Bingham, Salt Lake County, having increased their tonnage by 50 per cent, or about half a million tons. This tonnage resulted largely from the operation of steam shovels and the two new concentrating mills near Garfield. The Tintic district recorded a most prosperous year in both production and development work. A site for the Knight smelter at Silver City was selected. The gold mines of the State did not prosper as previously; the Consolidated Mercur and the Annie Laurie produced less than usual, the Sacramento was closed half of the year, and the Sevier Consolidated went into the receiver's hands. There were twenty-four dividend payers during the year, fifteen of which have property in the Tintic district. Railroad building consisted in the extension of the Western Pacific and the completion of the Rio Grande Western's Sky Line from Bingham to Garfield.

A great many power plants for generating electricity have recently been built in the State, and this power is in many cases being substituted for steam in the mines, smelters, and reduction works. As the price of copper ranged from 25 to about 13 cents at the close of the year, there was unusual work at both mines and smelters most of the year, with a closing of many mines and smelters, beginning with

September. The Yampa smelter, in Bingham Canyon, closed after struggling to get fuel and ore, transportation being inadequate. The Utah Smelting Company at Ogden closed its plant after operating a short time. The Bingham Consolidated and United States plants at Bingham Junction and the Utah Consolidated at Murray were closed as a result of the lawsuit with the farmers of the vicinity. The United States lead plant will continue after installing devices for neutralizing the fumes, but there is no plan for operating the Bingham Consolidated.

Utah has 179 producing mines, the total value of whose product was over $31,000,000, of which about $23,000,000 was creditable to crude ore shipped to smelters, $7,000,000 to concentrates, and nearly $1,000,000 to ore treated at gold and silver mills. Gold decreased to a great extent in siliceous ore, but increased materially in copper ore and lead ore. Copper ore supplied nearly 64 per cent, lead ore nearly 19 per cent, and siliceous ore over 17 per cent. Silver increased slightly from siliceous ore and, to a great extent, from copper ore and lead ore, but there was a great reduction of the amount of that metal from mixed ores. Siliceous ore supplied only about 1 per cent, copper about 31 per cent, and lead ore over 66 per cent. The value of gold and silver had been increasing gradually for many years, but in 1907 there was a decrease of over $500,000. Colorado was the only State that exceeded Utah in the production of silver in 1907, while in gold Utah took fifth place, being exceeded by Colorado, Alaska, California, and Nevada.

The value of Beaver County's output was somewhat in excess of that of the previous year. The production of silver, copper, and zinc increased; gold was about the same, but lead decreased. The Cactus mine, the largest copper producer, shipped ore and concentrates and paid its first dividend. The Horn Silver shipped lead ore, copper ore, and zinc ore, the total value of which was less than in past years.

The Majestic Copper Mining and Smelting Company owns mines in three districts and a smelter near Milford. The smelter was idle, but some ore was shipped from the properties. In the Star district the Talisman, Moscow, and Cedar made many shipments. The former shipped zinc ore for the first time. New properties making small shipments were the King of the Hills, Silver King, Buckeye, Milford, Creole, and Progressive.

Box Elder County made good progress. The Century mine at Park Valley produced bullion and a lead concentrate. The only other important shipments were made from the property of the Salt Lake Copper Company in the Lucin district. This copper ore contains little gold or silver.

Emery County has no shippers of importance. A little copper ore was shipped from the Fransden mine.

Garfield, Grand, San Juan, and Uinta counties produce a small amount of placer gold, taken from the Colorado, Grand, and Green rivers. Two deep mines in Grand County produced some gold and silver, and one shipped a test lot of copper ore.

The Jennie mine at Gold Springs was the only producer in Iron County. A 30-ton amalgamation mill was operated part of the year, and bullion was sent to the Denver mint.

Juab County includes the Fish Springs, Mount Nebo, and Tintic districts. All the regular shippers, more than thirty in number, assisted in making a record production in all metals. Several new shippers made their appearance, Mount Vernon, Bullock, Silver Park, Silver Queen, Nephi, and Kulskowski. The Centennial-Eureka and the Mammoth mines produced some ore unusually rich in gold and silver. More than three-fourths of the gold from the Tintic district, part of which is in Utah County, was derived from copper ore, while lead ore supplied nearly all the remainder. Silver, which amounted to nearly 5,000,000 ounces, came mostly from lead and copper ores, the former yielding nearly three-fifths. The Colorado, a new shipper, sent a large tonnage of rich silver-lead ore to the smelters, and entered the dividend list. Development is most active, and production should be greatly aided by the operation of the Knight Smelter at Silver City.

Morgan County's production was unimportant, small shipments only being made from the Carbonate Hill and the Chicago-Utah.

Piute County suffered a 22 per cent decrease in gold output. The Annie Laurie was closed the latter part of the year, and at intervals during the year, for repairs. The Sevier Consolidated was not only closed several months, but went into the hands of a receiver. A new mine, called the Clyde, made a few shipments of copper ore to the smelters. Sevier County failed to make any production.

The Big Cottonwood district of Salt Lake County did some development work, but little producing, the shippers being the Maxfield, Copper Apex, and Blue Point. Little Cottonwood, or the camp of Alta, contributed more than $500,000 worth of ore. The Columbus Consolidated was the largest shipper, the product being crude ore and concentrate containing gold, silver, copper, and lead. The City Rocks shipped many carloads of copper ore. Small producers were the South Columbus, Flagstaff, and Columbus Wedge. The old Emma was operated, but did not make important shipments. Most striking progress was made at Bingham, Utah's great copper camp, which turned out 6,000,000 pounds more copper than in the previous year. The district's increase in total value was due to copper alone, as the gold, silver, and lead decreased. The tonnage shipped was increased over 50 per cent, which accounts for a decrease to $3.23 in value per ton. Much of this tonnage was the result of the operation of nine steam shovels belonging to the Utah Copper Company and the Boston Consolidated. The ore contains from 1 to 2 per cent copper, and averages about 17 cents per ton in gold and 5 cents in silver. It is easy to see the necessity of a large tonnage. The Utah Copper Company operated its 800-ton Copperton mill at Bingham and the new concentrating mill at Garfield, equipped with Chillian rolls. At the end of 1907 this mill had a capacity of 4,000 tons, and is to be increased to 6,000. The company's mine is a network of underground workings approximating 17 miles. The Boston Consolidated also has its new concentrator near Garfield. This is equipped with Nissen stamps, and is to have a capacity of 3,000 tons. Operation was begun in 1908. When the Yampa Smelter closed, repairs and improvements were made so as to treat 750 tons per day, and the new aerial tram from the mines was completed. A new mill of 200 tons, called the Markham Gulch, was completed to treat the ores of the Utah Apex and Utah Development companies.

The Park City region, which is situated in both Summit and Wasatch counties, decreased its production in all metals. The gold and silver value amounted to over $2,000,000, nearly one-tenth of which was in gold. Almost all the product is from lead ore, which has valuable silver content. The Ontario drain tunnel, the functions of which have been so retarded by the caving of the ground, was, at the end of the year, in condition to drain the large producers of the region. The Silver King Coalition Mines Company was formed to include the Silver King, Kearns-Keith, Magnolia-St. Louis, Pinyon Ridge, Odin, and other properties. At the property of the Daly Judge a dry concentrator was built to treat the middlings of the present mill.

Tooele County includes the camps of Stockton, Ophir, and Mercur, and the North Tintic district. The output from Stockton was by no means up to the average, due to the closing of the principal producer, the Honerine. Ophir did better on account of the production of the Ophir Hill Consolidated and the Cliff Mining Company. Mercur was below the normal, and the Sacramento was closed in July. The Scranton, in the North Tintic district, produced a large amount of zinc ore and some lead ore. Development disclosed another body of rich zinc ore. The value of the county's gold and silver amounted to nearly $1,000,000. Most of the gold comes from siliceous ore, while the silver is gained principally from lead ore.

Utah County, which includes the American Fork district and part of Tintic district, more than doubled the value of its product. As in former years, the largest shipper from American Fork was the Miller mine. Other properties shipping were the Surprise, Pacific, Dutchman, Milkmaid, and Mountain Dell. The county more than doubled its product of lead and silver on account of four shippers in the Tintic district, Beck Tunnel, May Day, Yankee Consolidated, and Colorado, the latter being an unusually heavy shipper for a new one.

Conditions in Washington County remained about the same. The Utah and Eastern is the main producer and made a copper matte, which was shipped East. A little silver was taken from the Free Coinage, and lead ore from the Paymaster and Black Warrior.

WASHINGTON.

While the combined yield in gold and silver in the State of Washington still continues less than $300,000 in the aggregate, yet the yield in 1907 was somewhat increased over that of 1906. Eight counties of the State yield gold, the most productive of which is Stevens County. In fact this county virtually doubled its product for the year, accounting for the increased yield and making up for losses in other counties. The ore in this county is all from quartz mines. The most productive placer mining county is Whatcom. The main silver yield comes from the counties of Snohomish, Stevens, and Ferry, named in order of output.

The tonnage of the mines in the State increased in 1907, but the average value per ton was lower than in 1906. There are now between fifty and sixty productive mines in the State and several hundred idle ones, though some that have not yet made any yield are in process of development. The mining industry in the State is languishing because of lack of capital and lack of transportation facilities. Numbers of the districts are far from railroad lines and at a distance from smelters, and, as much of the ore must be smelted, the mines lie idle in consequence. Until railroad transportation is afforded these mines must remain inactive. Some districts, however, which made no yield in 1907 expect to produce in 1908. A few new smelters and some new mills were constructed during 1907. Some concentrating plants have also been put up. At least two districts, one in King and the other in Okanogan County, were in 1907 for the first time furnished with railroad facilities. There are large numbers of known mines in the State which, under present conditions, can not be made profitable, and until cheaper reduction costs and better transportation facilities are provided little improvement in the mining industry is to be expected.

WYOMING.

The greatly increased output of gold, silver, and copper is directly due to the Penn-Wyoming Company resuming smelting operations at its mill and smelter at Encampment, which were twice burned and rebuilt during 1905 and 1906.

The increased placer production from the mines in Fremont and Uinta counties added to the gold output, but the placer mines in Albany and Crook counties made much smaller clean ups, or none at all. The silver production for 1907 was obtained as a by-product of the increased tonnage of argentiferous copper ores of Carbon and Uinta counties.

Better transportation facilities were realized in various sections of the State by the construction of new railroads. The Laramie and Hahn's Peak built into Centennial from Laramie, benefiting the mines in southwestern Albany County. The completion of the railroad from Walcott, on the Union Pacific line, into Saratoga and Encampment, by the smelter company was a direct help to the entire Upper Platte district, which is the center of many low grade copper deposits heretofore not workable at a profit because of cost of hauling.

In the central part of the State, the Wyoming and Northwestern line was extended from Casper to Lander via Shoshoni. This brings railroad transportation within reach of the Rattlesnake Range, Sweetwater Valley, Copper Mountain, and Owl Creek districts, and terminates within 35 miles of the South Pass district, where are found the Miner's Delight and Carissa mines, famous producers in the early days of Wyoming. The Burlington Railroad Company also extended its branch up the Big Horn River as far as Thermopolis during the year.

Development work was being carried on in all of the more important camps of the State, and considerable prospecting was done in lower Big Horn and upper Fremont counties.

Present indications point toward a greatly increased output from the various camps for 1908.

THE EASTERN AND SOUTH APPALACHIAN STATES.

The value of the total production of the precious metals in the Eastern and South Appalachian States, including Alabama, Georgia, New Hampshire, North Carolina, South Carolina, Tennessee, Vermont, and Virginia in 1907 was about equal to that for 1906. There was a slightly increased production of gold which was offset in value by a decreased production of silver. This latter decrease was due to the financial depression of the latter part cf the year and to the corresponding low prices for copper. These factors caused decreased production of copper ore from the North Carolina mines and, therefore, of silver production, as most of the silver output of the Eastern States is from copper ores. The increase of copper mining recorded in Tennessee for 1907 was not sufficient to offset the greatly reduced production in North Carolina. As compared with the production of 1906 increased production of gold was recorded in Alabama, Georgia, North Carolina, and Vermont, and decreased production from South Carolina, Tennessee, and Virginia; increased value of silver output is to be credited to all of these States except North Carolina, where the decrease was considerable, and Virginia, where it was insignificant.

The mining of the precious metals in the Eastern States in 1907 showed activity and prosperity somewhat above the normal during the first eight months of the year. New interest was shown in some of the mines of Alabama, Georgia, North Carolina, and Vermont, and the three most important producers of the precious metals of the South, the Haile mine of South Carolina, the Iola of North Carolina, and the Franklin of Georgia, maintained uninterrupted production throughout the year.

In value of total production of precious metals and in production of gold in 1907 North Carolina ranked first, Georgia second, and South Carolina third. In value of production of silver in 1907 Tennessee ranked first, North Carolina second, and Vermont third. As sources of the precious metals, the greater part of the gold was from siliceous ores, and the next most important source was the placers. The chief source of silver was the output of copper ores followed by that of siliceous ores.

ALABAMA.

In 1907 the production of gold and silver in Alabama was slightly increased over that of 1906. The only important producer of the precious metals was the Hillabee Mining Company operating on the Hog Mountain mines in Tallapoosa County, which maintained its regular annual output. The Gold Ridge Mining Company experimented with appliances for the saving of gold from the placers of Clear Creek, near Arbacoochee in Cleburne County, and performed considerable development work upon their mines at Gold Ridge in Randolph County. At the latter place a steam 2-stamp mill was installed for trial runs on the ore, and hopes were entertained for production in 1908. In the making of sulphuric acid from pyritic ores of the Southern Sulphur Ore Company, whose mines are at Pyriton, in Clay County, some silver and gold were obtained.

GEORGIA.

The production of the precious metals in 1907 shows a greater increase over that of 1906 in Georgia than in any other State. The increase was principally in gold, and was most notable in the production of the Franklin mine in Cherokee County, which enjoyed a prosperous year. Contributions to the gold output were also important from placer and other surface workings. In Lincoln County the Seminole mine produced about the same amount of gold and silver from the copper-lead ores mined there as in 1906. In Lumpkin County, from the heart of the Dahlonega gold belt, production was reported to the United States Geological Survey from the Lockhart and Singleton mines, worked by lessees, from the hydraulic and dredging operations of the Dahlonega Gold Milling and Mining Company on the Chestatee, and from various open cuts. The total output of gold and silver from the Dahlonega region was small in comparison with the apparent resources available there, and was chiefly placer gold. In McDuffie County the output of the Columbia mines was important, as was the production in White County from the Blow dredge at Nacoochee and the Canadian-American Loud mine near Cleveland.

NORTH CAROLINA.

In 1907 the production of gold in North Carolina showed a slight increase over that of 1906, but the production of silver was considerably decreased, the net result being an important decrease in value of the precious-metal output as compared with that of 1906. This was chiefly caused by the closing down of the copper mines at Gold Hill, in Rowan County, during the financial depression of the latter part of the year. These copper ores furnish much of the silver produced in North Carolina.

North Carolina remains the most important of the Eastern States in total value of production of the precious metals. During 1907 there were 26 placer mines and 17 deep mines in operation in this State for all or part of the year, and until the financial stringency mining was actively pushed. In North Carolina, as in some of the other Southern States, there are probably many deep mines now idle that have never been worked out, but have rather suffered in many cases from ill-advised experiments and management. Surface mining in the Appalachian States has probably passed its prime, and although there will undoubtedly be important returns from these workings for many years, a decline is expected in supplies of gold from this source.

In Burke, Cabarrus, and Catawba counties mining in 1907 was confined to placer workings. In Davidson County the Hercules Gold and Copper Mining Company produced gold, silver, and copper from the Emmons mine, as did the Blue Wing and Copper King mines in Granville County, on the Virgilina copper belt. In Gaston County a small amount of gold was recovered from reworking the old dump of the King's Mountain mine. In Guilford County the Fentress and Hodson mines produced, as did several placers. There was also a production of placer gold from both McDowell and Mecklenburg counties, and from the Rudicil mine, near Charlotte; several shipments of rich ores to smelters were made. In Montgomery County there was a small placer production and the usual important output from the Iola mine, the second mine in rank of gold production in the Eastern States. In Moore County surface workings yielded some gold, and in Person County, whose copper mines are on the

Virgilina belt extending into Virginia, gold and silver were produced from copper ores. In Randolph County small amounts of gold were obtained from placers, and silver was produced from copper ores of the Scarlett mine. In Rowan County placer gold was produced, as was an important amount of the precious metal from the copper ores at Gold Hill. In both Ruth and Rutherford counties placer gold was produced in 1907, and in Stanly County a small output came from surface workings also. In Union County the Colossus mine was idle, but the Davis and other mines produced small amounts of placer gold.

SOUTH CAROLINA.

During 1907 the production of gold in South Carolina showed a material decrease from that of 1906, while the output of silver, always small, showed a very slight increase.

Mining in this State in 1907 was practically confined to six placer mines in Abbeville, Cherokee, and Lancaster counties, and to the well-known Haile mine in the latter county, the most important producer of gold in the Eastern States. The Haile mine continued its successful career and the large ore bodies of low grade were worked extensively and with singular skill in maintaining low mining and treatment costs.

TENNESSEE.

The production of precious metals in Tennessee in 1907 showed a material decrease in output of gold, but a corresponding increase in that of silver, the net result being about equal in value to the total production of gold and silver in 1906.

The placers of Monroe County made no gold production in 1907, thus accounting chiefly for the decrease of output for this metal. The copper mines of Polk County, at Ducktown, the source of the silver from Tennessee, yielded an increased production from the four mines worked by the Tennessee Copper Company and the Ducktown Sulphur Copper and Iron Company.

VERMONT.

In 1907 the copper mines of Orange County, Vt., yielded an increased production of silver and gold, in connection with the copper output. The supply of gold from these ores is insignificant, but, should the conditions of the copper market warrant working the low-grade ores of this county, an increased production of silver may be expected from Vermont.

VIRGINIA.

During the year 1907 Virginia produced less gold and silver than in 1906. There was a small production of placer gold from Stafford County, but the chief output of precious metals from this State in 1907 was from the Virgilina district of Halifax County. The Gold Banks mine at Virgilina, a gold-quartz mine, and the Seaboard Copper mine, which produces highly siliceous copper ores, both produced gold and small amounts of silver, the first from a stamp mill on the property, and the second from rich copper concentrates shipped to smelters as the result of trial runs of the new concentrating mill recently installed at the mine.

PART III.

PRODUCTION OF GOLD AND SILVER IN FOREIGN COUNTRIES.

PRODUCTION OF GOLD AND SILVER IN FOREIGN COUNTRIES IN 1907.

[Arranged geographically.]

NORTH AMERICA.

British North America.

The gold and silver production of British North America, by provinces, according to the figures furnished by the director of mines, Ottawa, Canada, was as follows:

Province.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Value.
Nova Scotia	13,676	$282,686		
Quebec			16,000	$10,452
Ontario	3,212	66,399	9,982,363	6,521,178
Alberta	33	675		
British Columbia	236,237	4,883,020	2,745,448	1,793,519
Yukon district	152,395	3,150,000	35,988	23,510
Total	405,553	8,382,780	12,779,799	8,348,659

BRITISH COLUMBIA GOLD AND SILVER PRODUCTION DURING 1907.

[From the Mining and Scientific Press, San Francisco, August 15, 1908.]

The annual report for 1907 of the minister of mines of British Columbia has recently been issued. The value of the mineral products of the province for the year 1907 is greater than that of any preceding year, amounting to $25,882,560, showing an increase over the last year of $902,014, equivalent to an increase of 3.6 per cent, and is 15.2 per cent greater than the output of 1905, and 36.3 per cent greater than that of 1904. An analysis of the returns shows that this increase is due to the greater tonnage of low-grade ore mined in the Boundary district and also to an increased tonnage from the collieries, both in coal and coke. As regards quantities, the production of placer gold last year was the smallest reported since 1898; that of vein gold was the lowest since 1900. Silver was less than in any year since 1895, and lead less than in any year since 1904. The copper output was greater than that of any previous year since 1906.

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The production of gold and silver for the year is as follows:

Metal.	Quantity.	Value.
	Ounces.	
Gold, placer	41,450	$828,000
Gold, lode	196,179	4,055,020
Silver	2,745,448	1,703,825

A comparison shows that British Columbia produced more gold, copper, and lead than all the rest of the Canadian Dominion combined, but that Ontario has surpassed her in the production of silver.

The total gold and silver production of British Columbia from the first record to and including 1907 is as follows:

Gold, placer	$69, 549, 103
Gold, lode	45, 070, 717
Silver	27, 289, 833

MINING PROGRESS IN BRITISH COLUMBIA.

[From the Mining World and Engineering Record, London, August 29, 1908.]

The statistical record of the placer mines of the province from 1858 to 1907 shows a total production of $69,549,103. The output for 1907 was $828,000, a decrease of about 12.7 per cent as compared with the previous year, and due to a dry season with a shortage of water for hydraulic mining. The production of placer gold is subject to sudden fluctuations, the discovery of new diggings causing a rise, but as is always the case with this class of mining, a few years sees the richer ground worked out and it takes some further years to permit of hydraulic and other forms of machine mining becoming established. The value of the gold produced from lode mining in the province during the year 1907 was $4,055,020, a decrease of $575,619, or about 12.5 per cent. About 95 per cent of the gold thus produced is recovered from smelting copper-bearing ores.

The total amount of silver produced in the province during the year 1907 was 2,745,448 ounces, valued at $1,703,825, a decrease in amount of 244,814 ounces and in value of the product of $193,495.

KLONDIKE DISTRICT.

By John Power Hutchins, Consulting Mining Engineer.

The gold production of Klondike district in 1907 was about $3,000,000; 50 per cent less than of 1906. The following table shows the gold production of Yukon Territory, which includes not only the Klondike district but several others. The gold output of these others is comparatively small, Klondike being the largest producer.

Gold Production of Yukon Territory.

1896	$300, 000	1902	$14, 500, 000
1897	2, 500, 000	1903	12, 250, 000
1898	10, 000, 000	1904	10, 350, 000
1899	16, 000, 000	1905	7, 000, 000
1900	22, 275, 000	1906	6, 000, 000
1901	18, 000, 000	1907 (estimated)	3, 000, 000

These figures reveal a marked similarity between this and other placer districts, not only in respect to the rapid increase of the annual output to a maximum a few years after the discovery of the placers but also in the rapid decrease in the output after the maximum figure had been reached. It is of passing interest to note that in both California and Klondike the annual production reached a maximum the fourth year after discovery. These figures were more than $80,000,000 for California and more than $22,000,000 for Klondike.

CAUSES OF REDUCED PRODUCTION.

Klondike is essentially a placer district. As it has no paying lode mines, the exhaustion of the placer areas results in smaller annual output. Because of this fact and others stated later, it is not likely that there will be a material increase in the gold output. Some placer districts, owing to the discovery and development of deep gravel deposits (like the lava-capped channels of California), have in their later years taken a new lease of life and increased for a time their annual output. In Klondike the probability of finding extensive new deposits of pay gravel is remote, but there is the possibility that developments will extend the boundaries of the deposits already exploited. Besides, other fragments of the "White Channel" occurring as terraces and benches on sides of the present Klondike Valley may be found, these would necessarily be small and of no great economic importance.

The "White Channel" is what is left of the ancient creek beds; it has a course approximately parallel to the present creeks but at an elevation from

100 to 300 feet greater. Where it has not been entirely eroded, this channel usually appears with its rim completely removed; locally it is called a bench deposit. There is one notable exception in the occurrence of the "White Channel;" this is the deposit between Lovett gulch and the Klondike River, for there the two rims of the "White Channel" are intact for several thousand feet. In Klondike there are no "back channels," "deep channels," or "breakouts" such as occur in California, where a wonderful plexus of "dead rivers," not all of the same geologic epoch and therefore differing from each other in a surprising degree, even now stimulates a steady search which is often rewarded by rich discovery.

Another way in which dying placer regions may be revived is by the introduction of machinery and large-scale operations to work gravel too poor to be profitably worked by hand. The Oroville district formerly supported 5,000 miners, who worked with rocker, long-tom, and sluice; but finally it was considered "worked out." The introduction of floating dredges resulted in a revival and its present prosperity. Most of the Klondike claims have been bought by a powerful corporation, and preparations are now under way to work these claims on a large scale, using mechanical devices to supplant most of the hand labor. A part of the decrease in gold output is due to the fact that the Klondike district is now in a transition period and much ground is now idle while these preparations are going forward.

The snowfall of a year ago was light, only about 8 inches, but as it thawed slowly, it was possible to make full use of the small amount of water available; considerable of this water was used in ground sluicing overburden. The season was a very dry one, as all months except September were very dry. The time of the freeze up was normal.

During the winter only a little drifting was done on Dominion, Sulphur, and Quartz creeks. None was done on Bonanza, Hunker, and El Dorado creeks. A small amount of rich ground was mined on Hunker Creek, the average content of which is said to have been about 25 cents per pan. The labor supply was ample; there are no miners' unions and no labor troubles. Wages are still high: 40 cents per hour and board, and 30 cents per hour and board are the respective summer and winter wages for common labor.

NOVA SCOTIA.

GOLD PRODUCTION.

[From Report on the Mines of Nova Scotia.]

OFFICE OF INSPECTOR OF MINES,
December 28, 1907.

The production of gold in Nova Scotia for the year ended September 30, 1907, was 15,006 ounces, compared with 14,079 ounces in 1906.

MEXICO.

The information received from the American ambassador at Mexico City, regarding the production of precious metals in Mexico during 1907, is as follows:

	Kilograms, fine.
Gold	28, 108. 834
Silver	1, 901, 934. 789

This represents 903,699 fine ounces of gold and 61,147,203 fine ounces of silver of the value of $18,681,116 and $40,357,154, respectively.

NEW MINING LAW.

[From The Mining and Scientific Press, San Francisco, June 13, 1908.]

It would seem from recent circumstances, notably as reflected in several articles of the proposed new mining law, that an antiforeign feeling was coming to the surface even among the better class of the Mexican people. When, two years,ago, an antiforeign scare was discussed in the papers, and it was rumored that on September 16, 1906, all foreigners would be killed or driven out of the country, it was stated that such feeling as existed in the Republic was limited to the laboring classes, particularly along the railroads and near the international border. But now objection to the foreigner seems to be manifest in the more enlightened circles, in the Congress of the Republic, and in one of the government departments. But a few weeks ago Lic. Rosendo Piñeda, a lawyer of Mexico City and a member of Congress, proposed an amendment to the constitution, placing restrictions upon foreigners in the practice of the professions, particularly that of the law, in the Republic of Mexico, and during the past week an absolutely prohibitory measure, aimed at foreigners, has been learned to exist in the proposed new mining law, which has been drafted at the instance of the minister of fomento, Lic. Oligario Molina. The sections referred to deny to foreigners the right to denounce or obtain mining properties in Mexico, and prohibit foreign companies from acquiring title to mining properties in the Republic. The articles embodying these prohibitions are in full as follows:

Article 141. No title deed for mining property can be issued to foreigners denouncing properties within the bounds of border States, if they do not previously obtain a special permission from the executive of the union. This requirement will also be exacted when the denouncement is made conjointly by foreigners and Mexicans. If the permission is refused, the ground shall be declared free, and the same effects result as those consequent on voluntary abandonment of a denouncement, as set forth in article 36.

Article 142. The permission mentioned in the foregoing article will also be necessary in order that foreigners may through any other process come into possession of mining properties or liens thereon in any of the border States or Territories.

Article 144. Foreign corporate bodies are incapable of denouncing and acqiuring henceforth, by any process, either mining properties or liens thereon within the territory of the Mexican Republic.

By the law of 1856 foreigners were debarred from acquiring land of any kind in a zone 20 leagues wide along the northern border without permission from the Federal Government. The new law would affect the entire area of the States of Sonora, Chihuahua, Coahuila, Nuevo Leon, Tamaulipas, and the Territory of Baja California. Some have held that the Government feared the growing strength of the foreign population in the north, but article 144 of the law indicates that there is a deeper purpose. The adoption of this article would mean that every foreign company, to hold mining properties in this country, would have to incorporate under the laws of Mexico, thus requiring their head offices to be in Mexico, and their principal officers to be residents of the Republic. This would be a practically prohibitory measure. It would seem to be suicidal for Mexico to adopt this. Unless concessions are made to capital it will go elsewhere, and Mexico will be allowed to drop behind. The draft of the new law was submitted to the chamber of mines, which has just been in session in Mexico City, for study and comment, and by unanimous vote of the Mexican members it was decided to ask the Government to wholly suppress article 144. During the discussion Lic. Losé L. Riqueña, one of the wealthiest residents of Mexico, president of the Dos Estrellas Mining Company of El Oro, made a lengthy speech before the chamber in opposition to the article, and said in part as follows: "Article 144 prohibits foreign companies from acquiring by any means title to mines or real rights in them. If this prohibition should be adopted the national mining industry will receive the most severe blow that could be given to its growth and prosperity. Mexico is a country of great natural resources but poor in capital. * * * If we need foreign capital we will have to leave the management of the business and the administration of the companies in the countries of their origin. * * * There is then no reason for shutting the door in their faces, nor for putting obstacles in the way of their acquiring mining properties. They do not injure us. They aid us." It is to be hoped that such counsels as these may prevail, and that the hot-heads may not rush through a law which would weaken confidence in the Republic and check the initiation of new enterprises.

CENTRAL AMERICAN STATES.

The production of gold and silver in the Central American States is usually arrived at by assuming that their export figures represent their product. The following table is compiled, for the most part, from the United States import figures:

State.	Gold.		Silver.	
	Weight.	Value.	Weight.	Commercial value.
	Fine ounces.		*Fine ounces.*	
Costa Rica	16,400	$339,026	274,483	$181,159
Guatemala	239	4,935	....	....
Honduras	12,498	258,363	803,880	530,561
Nicaragua	32,266	666,991	2,127	1,404
Panama	194	4,010	2,121	1,400
Salvador	40,368	834,484	810,285	534,788
Total	101,965	2,107,809	1,892,896	1,249,312

The total product as given above, compared with the previous year, shows an increase in gold of $197.076 and in silver 222,737 ounces, fine.

Costa Rica.

The American consul at San Jose, in his reply to this bureau's inquiries relative to the product of gold and silver in 1907, stated it to be equal to Costa Rica's exports, all of which came to the United States, and were as follows: Gold bullion, $339,026, and silver bullion, $181,159, equivalent to 16,400 and 274,483 fine ounces, respectively.

Guatemala.

The United States Bureau of Statistics, Department of Commerce and Labor, states that the value of gold ore imported by Guatemala during 1907 was $4.935, which represents 239 ounces, fine, and is assumed to have been the gold produced by that country in 1907.

Honduras.

The American consul at Tegucigalpa reports that the gold and silver exports from Honduras during 1907 amounted to, gold, $10,000; silver, $250.000, which is considered as the amount produced in that State during that year.

The United States Bureau of Statistics, Department of Commerce and Labor, reports that the amounts of gold and silver bullion and ore imported from Honduras during 1907 was as follows: Gold, $258,363; silver, $530.561 (commercial value), which represents 12,498 ounces, fine, of gold, and 803.880 ounces, fine, of silver, which latter figures are used as the production in the table of the world's production for 1907.

EXPORT TAX ON GOLD AND SILVER.

[From Daily Consular and Trade Reports, February 24, 1908.]

Consul W. E. Alger, of Tegucigalpa, transmits the following translation of decree imposing export duties on precious metals:

Article 1. A tax of 12 per cent of its value is established on crude silver exported from the country.

Article 2. A tax of 2 per cent of its value is established on gold in bars or dust exported from the country.

Article 3. The fixed value of silver for purpose of the tax is 40 soles (the present value of a sol in United States currency is 49.9 cents) per kilo; of gold, 675 soles per kilo.

Article 4. The disposition of this decree does not apply to mining enterprises that have concessions granting them free exportation of their metals.

This decree goes into effect on date of its publication, December 10, 1907.

NICARAGUA.

According to the figures furnished this bureau by the United States Bureau of Statistics the value of gold bullion imported from Nicaragua during 1907 was $57,987, and the value of gold in ores, $609,004, a total of $666,991, which represents 32,266 ounces, fine.

The commercial value of silver imported in ores was $1,404, representing, at the average yearly price of silver, 2,127 ounces, fine.

PANAMA.

From the same source, the value of gold bullion imported from Panama was $4,010, representing 194 ounces, fine, and the value of silver bullion imported, $1,400, representing 2,121 ounces, fine.

SALVADOR.

The chargé d'affaires of the United States legation at Salvador reports that the product of gold and silver for 1907 was 7,034 kilograms of gold valued at 1,793,201 colones, and silver 18,194 kilograms, valued at 1,149,193 colones, which gives a valuation in United States money for the gold of $834,484, representing 40,368 ounces, fine, and for the silver, $534,788, representing 810,285 ounces, fine.

MINERAL RESOURCES OF THE DOMINICAN REPUBLIC.

[From the Board of Trade Journal, London, May 28, 1908.]

The following particulars of the mineral resources of the Dominican Republic have been received from the British vice-consul at Santo Domingo (Mr. E. M. de Garston):

GOLD.

Veins of auriferous quartz are found all along the central mountain chain, or Gran Cordillera, the richest lodes being always in metamorphic rocks, near the crystal rocks. Alluvial gold exists in the upper Jaina River, in the province of Santo Domingo. It is coarse and of a deep yellow color, showing a high degree of purity. An assay of 12 ounces, made at the United States mint in 1870, showed a fineness of 0.946. In the northern part of the island—that is, on the northern flank of the Cibao—alluvial gold is found in a number of places, especially in streams flowing from the Sierra de Cibao into the Yaque

River. The Rio Verde and Sabaneta placers in the Cibao region have acquired quite a name, and it is reported that natives washing the gold-bearing sands in hateas, or common vats, have gathered as much as from 5 to 6 ounces a week. The mines and placers known to exist in the province of Santiago are the Cerro de Piedra Blanca, in Paralimon; San Jose de las Matas, about 1½ miles from San Jose, which contains gold and peroxide of iron; El Pinar, San Jose de las Matas, on the road to Guava Cuano, containing quartz veins, talcum, and gold schists; Loma de la Mina, in the vicinity of the Magu River, with gold-bearing decomposed porphyry; Las Guasimas, and La Cajera in San Jose de las Matas, containing gold. The principal placers are the Dicayagua River, in Janico, La Zanja, in Bao River, and the Yaque River.

SILVER.

It is reported that this metal has been found in Jarabacoa, Cotuy, Jaina, Guanuma, Higuey, and the province of Santiago. It has been obtained in a very pure state in Tañei mine, in the Yasica section of the Puerto Plata municipality.

SOUTH AMERICA.

Colombia.

According to the yearly statement furnished by the Bureau of Statistics, Department of Commerce and Labor of the United States, this country imported gold bullion and ore from Colombia in 1907 valued at $1,913,507, representing 92,566 ounces, fine, and silver bullion and ore of the commercial value of $12,456, representing 18,873 ounces, fine.

The Annual Statement of the Trade of the United Kingdom in 1907 shows that Great Britain received from Colombia during 1907 gold bullion to the amount of 58,488 ounces, British standard, or 53,613 ounces, fine, at a value of $1,108,279, and silver bullion to the amount of 505,248 ounces, British standard, equivalent to 467,354 ounces, fine, at the commercial value of $308,453, and silver in ores valued at £23,650, equivalent to $115,093, representing 174,383 ounces, fine.

Germany imported from Colombia gold bullion valued at $50,510, representing 2,443 ounces, fine.

The American minister at Bogota reports that Colombia exported to France gold bullion valued at $183,336, representing 8,869 ounces, fine, and silver bullion of the commercial value of $6,870, representing 10,409 ounces, fine.

The silver coinage executed at Bogota during 1907 was 1,125,562 50-cent pieces containing 377,700 fine ounces of the commercial value of $249,282. This coinage was made from the product of the year.

The total product of gold was 157,491 ounces, fine, valued at $3,255,632, and the product of silver, 1,048,719 ounces, fine, at a commercial value of $692,154.

British Guiana.

The American consul at Georgetown submits the following figures for the gold production of British Guiana during 1907: Gold, 68,215 ounces of the fineness of 0.920 to 0.930, which would be equal to 63,099 ounces, fine, of the value of $1,304,372, at which figure it is placed in the table of the world's production in this report.

GUIANA GOLD PRODUCTION.

[From Daily Consular and Trade Reports, June 11, 1908.]

DECLINE IN OUTPUT FROM BRITISH SOUTH AMERICAN COLONY.

Consul Selah Merrill, writing from Georgetown, furnishes the following information concerning gold mining in British Guiana:

Many people appear to be misinformed as to the gold production of British Guiana. Here, as in other gold-producing countries, companies have been formed, great expectations raised, and after a little the companies have disappeared. The hills far in the interior of the colony have considerable gold-bearing rock, but the extent of these deposits no one knows. When gold was first discovered there was much excitement and much money lost. Now the talk is more sober and the majority of people are advancing at a slower pace. It is thought that a word of caution may not be out of place to those who with limited means think of gold mining as a manner of investment. Gold production in this country had a small beginning; after a time it increased till a culminating point was reached; since then it has been in a state of decline, as the following statistics of production for this colony show:

Year.	Ounces.	Year.	Ounces.
1884	250	1895-96	126,107
1885	939	1897-98	124,327
1886	6,513	1898-99	112,464
1887	11,906	1899-1900	112,824
1888	14,570	1900-1901	108,522
1889	28,282	1901-2	101,709
1890	62,615	1902-3	102,363
1891	101,298	1903-4	90,207
1892-93	133,146	1904-5	94,617
1893-94	137,692	1905-6	95,044
1894-95	134,047	1906-7	86,125

DUTCH GUIANA.

The London Mining Journal for September 5, 1908, gives the gold product of Dutch Guiana as 1,104,396 kilograms. This product has heretofore been taken at the fineness of 0.872, which gives a product of 963.033 kilograms, or 30,961 ounces, fine, of the value of $640,032.

FRENCH GUIANA.

The United States minister at Paris reports that the gold product of Guiana for 1906 was 2,797 kilograms, valued at 9,636,000 francs, representing 89,923.55 ounces, fine, with a valuation in United States currency of $1,858,885. In the absence of any official figures for 1907 these figures are repeated.

VENEZUELA.

The yearly statement of the United States' Bureau of Statistics, Department of Commerce and Labor, shows that in 1907 gold bullion to the value of $21,783 was imported from Venezuela, representing 1,054 ounces, fine.

The Annual Statement of the Trade of the United Kingdom for 1907 shows that Great Britain imported from Venezuela 31 ounces (British standard) of gold, equal to 28 ounces, fine, valued at $579.

Germany imported no bullion from Venezuela in 1907. The total product of gold for Venezuela as estimated by figures of imports of other countries from that State, is 1,082 ounces, fine, valued at $22,362.

ECUADOR.

In the absence of any official information relative to the production of gold and silver in Ecuador during 1907 the figures of the imports of other countries from that State are submitted for its production.

The United States' Bureau of Statistics states that gold bullion of the value of $149,036 and gold in ore of the value of $118,097, total, $267,133, representing 12,923 ounces, fine. The silver bullion imports were valued at $1,621 (commercial valuation), representing 2,456 ounces, fine.

BRAZIL.

The American ambassador at Petropolis writes that the production of gold in Brazil is about equal to the exports, and states that the exports for 1907 were 3,824,445 grams, which, taken at the fineness as formerly reported of 0.795, gives a fine product of 3,040.433 kilograms, or 97,750 ounces, of the value of $2,020,672.

VALUABLE MINING DEPOSITS NEWLY DISCOVERED.

[From Bulletin of the International Bureau of the American Republics, September, 1908.]

Advices have been received from Bello Horizonte with the information that a very rich deposit of surface gold has been recently discovered at a point called "Olho de Agua," 8 kilometers from the city of Montes Claros, in the northern part of the State of Minas, Brazil, and that prospectors to the number of 3,000 have already left the city for the gold fields. Gold to the value of about $150,000 has been secured in flakes varying in weight from 100 to 720 grams each. One of the latter, owing to its unusual weight, has been forwarded to Rio de Janeiro to be exhibited at the National Exposition. * * *

PERU.

The United States minister at Lima reports the product of the precious metals in Peru for 1907 as follows: Gold, 774.193 kilograms, fine, equivalent to 24,890 ounces, fine, valued at $514,522; and silver, 297,546.442 kilograms, fine, or 9,566,118 ounces, fine, at a commercial value of $6,313,638.

GOLD MINING IN COLOMBIA AND PERU.

[From Bulletin of the International Bureau of the American Republics, November, 1908.]

In the minds of many people the Andes exist as a single well-defined mountain range extending from the Isthmus of Panama to Patagonia, parallel and near to the Pacific coast of the continent of South America. As a matter of fact, the great South American mountain system presents scarcely anywhere throughout its extent a well-defined range. Most often there are several ranges, sometimes approximately parallel, then again appearing as offshoots, the one to the other, and sometimes for hundreds of miles with not even the semblance of contiguity, simply great mountain masses dropped down, apparently by hazard.

In Colombia the Andes divide into three loosely constructed chains, running in a general north and south direction, and known as the Eastern, Central, and Western Cordilleras. Between the Eastern and Western, and divided by the Central Cordilleras, are the two deep longitudinal valleys of the Cauca and the Magdalena. In the north there is the great *massif* of Santa Marta, considered by some as not a part of the Andean system; and to the northwest lies the Atrato Valley between the low hills, marking the southern limit of the Central American chain, which extends down into the Isthmus of Darien and the northern limit of the Western Cordilleras. The Western and Central Cordilleras are much richer in ores than the Eastern.

The north central primary deposits include the districts of Remedias, Santa Rosa de Osos, Anori Amalfi, and San Pedro.

The ores of these districts are generally of the familiar quartz-sulphide type. The surface ores are often a rusty brown quartz, locally called colorado. The sulphide is a pyrite in the unoxidized ores, with which appears often galena and blende. In some places the pyrite is replaced by arsenopyrite. The gold is very often visible as coarse scales and is of a fineness usually about 0.600 or over.

The ores of the western deposits on the Pacific side of the Cordilleras and the slope of the Atrato Valley are similar in type to the central deposits. The southern deposits, on the contrary, differ in character from the other two main groups. These ores are mainly blende with pyrite and galena, antimony replacing the arcenic of the northern deposits. They are auriferous silver ores in quartz and argentiferous gold ores in magnesite and calcite. The southern deposits include those in the neighborhood of Titiribi, Supia, Manizales, and Caramanta.

The principal mines in Antioquia are gold mines.

Prof. Henry W. Nichols, of the Field Columbian Museum, who made an examination of the Colombian ores collected for exhibit at the World's Colombian Exposition by Señor F. Pereira Gamba, a mining engineer of Bogota, says:

"The ores of Colombia are of two classes, those occurring in quartz in fissure veins of the ordinary type and those formed by segregation from the surrounding rock. The fissure vein deposits are those of North-Central Antioquia, and present no feature of especial interest. The other deposits, formed by segregation from the surrounding lavas, differ in character according to the nature of the material in which they occur. In all deposits of the second class the prevailing sulphide is blende. Those in andesite and other lavas have a quartz gangue, and are of metasomatic origin. Some, if not all, are in brecciated zones, in which the fragments are both replaced by and cemented with the ore-bearing quartz. All stages of replacement may be traced in the specimens. The ores in the tuffs form the most interesting class. They differ much from the above-mentioned deposits, although the two kinds sometimes occur within a few miles of each other. The tuffs, formed of comminuted lavas, decompose very rapidly, especially under the influence of the hot, acid waters of which accompany volcanic eruptions, and often persist for many years after. The decay of the ferro-magnesian and lime-bearing minerals of the tuffs, forms as the gangue of these ores, sometimes dolomite and sometimes calcite. The veins are very narrow and irregular, one of the most important reaching a width of less than 2 inches. Often in place of a single vein there is a zone of branching dolomite or calcite threads in the tuff. These features are evidence of a deposit formed by a leaching of the surrounding tuff."

The great bulk of the gold mining in Colombia has been from secondary deposits. From these alluvial deposits, placers, came all the gold of the Indians and of the early Spaniards. There are no reliable statistics of the amount of gold produced by the Colombian mines in the early Spanish days, but even in these days, when we are accustomed to gold and silver production on a large scale, the bulk of gold with which the royal treasure ships of His Most Christian Majesty, sailing from the Spanish Main, carried to Spain would appear tremendous. It has been estimated that the mines of Colombia alone produced more gold during a single fifty years of Spanish occupancy than had been mined in all the world prior to the time of Columbus. Señor Vicente Restrepo, in his study of the subject, estimates that the province of Antioquia up to 1882 had produced $252,000,000 in gold and silver. This is a conservative estimate and far below that of many other writers.

The methods were crude in the extreme, but with water abundant and labor cheap the results were great. Fray Pedro Simon gives a little picture of the alluvial placers at Remedios:

"This is one of the richest territories man has discovered. From the beds of its creeks and brooks the Indians have gathered grains of gold as large as grains of wheat or chickpeas and many even larger than hazelnuts. The city was so near the mines that everybody engaged in mining; and so large an amount of gold was gathered in a few days that the people soon quit working for it. Then negro slaves were bought and sent in gangs by the merchants of Cartagena, while the Indians occupied themselves in cultivating corn. As a result of this, in two years the few Spaniards who lived in Remedios had become the richest men in the Indies, some 20 who formed the chief part of the population owning more than 2,000 negro slaves; a week's labor of a single slave produced at least $10 in gold; many found as much in one day; some $30, some $40, some $100, and a negro upon one occasion obtained $500 in a single day. For some time Capt. Diego de Ospina extracted $2,500 a week, and he himself told me some time ago that he had paid the King, as a fifteenth part of the gold (the royal tax) he had mined, more than $60,000.

"The gold was found by the negroes and Indians, who extracted it in two ways; at first it was gold which they called the overflow of the veins and which was the outward sign of their existence; they offered then to seek for these veins, which they succeeded in finding at the sources of the streams they ascended, and the result in many places was the profit which we have mentioned."

The veins spoken of by Fray Pedro were elevated placers or beds of disintegrated mineral formed by the slow wearing away of the auriferous earth as the streams deepen their beds. They are called mines of *aventadero* and are much richer than the beds of *manto*.

Further on the excellent friar says:

"I visited several of these mines in the year 1613, in particular one called Loma Rica. I saw negro women who, by scratching up the earth with their fingers at the doors of their houses and washing it, obtained $2 or $3 in gold. In fact, everybody was loaded with it from the youngest to the oldest, so that it appeared as if the earth had made its last will and testament and divided its great wealth among all its children."

The alluvial deposits are of four kinds: First, deposits in the actual bed of running streams; second, low banks formed by the ancient bed of the stream; third, high banks or mines of aventadero; and, fourth, hill mines, situated in elevated plains above the level of streams and so placed by the upheaval of the land after the placer formation.

In practically all of these the deposits of gold rest upon a rock formation under layers more or less thick of sand, clay, and conglomerate.

The more recent alluvial deposits are in the sands of the numerous rivers and brooks.

The alluvial gold of Colombia occurs in many forms. From fine dust passing through grains more or less laminated, rounded, angular, acicular, crystallized, and curled.

In Antioquia, as a rule, nuggets of any considerable size are rare, although they are occasionally found in weight up to 500 grams.

Señor Vicento Restrepo, in his Study of the Gold and Silver Mines of Colombia, says that in Antioquia the forms of the cystals in which gold is found are—

"The cube, which is very rare.

"The cubo-octahedron.

"The octahedron, the form most frequently met with and subject to the most capricious irregularities, sometimes four of its faces appearing elongated, changing their triangular form into imperfect quadrilaterals and having the aspect of tablets, sometimes with surfaces prolonged and more or less concave terminating in an edge; again with hollow faces, which is very commonly the case in the octahedron, or the concave surfaces have disappeared, leaving only a shell in which the edges of the crystals form triangles.

"The rhomboidal dodecahedron, rather uncommon.

"The trapezohedron, after the octahedron the most common form.

"Pentagonal dodecahedrons and tetrahedrons, occasionally encountered in half-formed state."

A. Dufrénoy, in his Traité de Minéralogie, says that the crystals or crystallized points of gold are frequently found projecting out of the earth and that this is the case in no other country.

All the gold of Antioquia carries silver, but in quantities varying more than in any other section of the world. The gold of California, Colorado, Australia, South Africa, the Ural Mountains, Chile, and Canada rarely exceeds 15 per cent in silver. It averages far below this figure, in most cases below 5 per cent. In Antioquia, placer gold carries from 3.5 to 36.1 per cent silver, and the quartz gold from 8.2 to 50 per cent silver.

The gold of the San Matias placer is 0.965 fine; that of the El Carmen is 0.634 fine. Between these two there is almost every degree of fineness from

0.930 down to 0.650. The Quiuria quartz gold is 0.919, and that of Sarral is only 0.500 fine, and there is the same variation between the other mines as with the placer deposits.

In the same mine and even in the same vein the combination will vary, so that the figures for the several mines can be taken as only approximate. The limit in some veins is twenty, thirty, and forty thousandths, and even more.

In the placers the combination is more constant, although occasionally the variation is considerable. For example, the gold of the Porce, near Dos Bocas, is 0.820, while that at Barbosa, on the same river, is 0.762.

One of the marked characteristics of Colombian gold is its brilliant yellow color.

Th secondary deposits of Colombia are by no means exhausted. There is still good and even rich pay dirt for many years to come, under the conditions of the largest hydraulic operations. But the great future for gold and silver mining in Colombia, as elsewhere, is in the primary quartz deposits. Placer mining the world over is more or less a lottery, perhaps less a lottery in the Andes than in most other places, but still without its surprises for good or bad. Quartz mining, on the contrary, is more stable and the returns in the long run are much greater. What is needed in Colombia is more mining capital and better and more modern methods of operating.

The very name of Peru is synonymous with gold. The tale of the immense ransom of the ill-fated Atahualpa, who, after having been taken prisoner by Pizarro and standing in the presence of his captor, reached up at arm's length along the walls of the room in which he was confined and offered to fill the room to the height marked with gold and all the remainder of the house with silver. The room was said to be 22 by 27 feet. It is computed that to fill the room in which Atahualpa was imprisoned would have taken over $600,000,000 in gold. The Spaniards, however, did not wait for the Indians to bring in all the gold but killed the emperor after only about $20,000,000 had been collected. The remainder of the treasure, which undoubtedly would have been delivered had Pizarro kept faith, was buried or thrown into the rivers and lakes. The great chain of gold made in celebration of the birth of his son by Huayna Capac, and which was over 200 yards long and could scarcely be lifted by 200 men, was said to have been thrown into Lake Orcos, near Cuzco.

The gold and silver bearing section of Peru covers an area over 1,000 miles long by an average of about 260 miles in width. It embraces nearly the whole of the Andean system with parts of the western and nearly all the eastern slope of the same.

The alluvial deposits are, with one exception, those of the Chuquicara River, all on the eastern side of the mountains. The quartz formations are on both sides of the summit. It must be remembered that the settled parts of Peru are on the western side of the mountains. This fact places the great placer deposits across the mountains from the centers of population, and as a consequence they have been less worked, and on the whole are less known than those of Colombia. This was the region from which the Incas drew their supplies.

The Pacific side of the Andes is rainless, but on the eastern side of the system there is an abundance of rain, and the streams are almost numberless. In no other part of the world is the present-day alluvial deposit of gold so great as in Peru. In the wet season the rush of waters down almost every mountain stream bring great quantities of gold-bearing sand and gravel. But few of these are worked, and these in the most primitive method. The one in common use is, during the time of low water, at a suitable place to pave the river bed with stones of considerable size set on edge, with large spaces between. These act as riffles when the river rises, collecting quantities of the richer gold-bearing sand. When the water falls the deposit is collected and panned and the stones again set in place for the next year's flood.

The deposits worked by the Incas were undoubtedly the ancient river and lake beds, which have been thrown up to their present position by the latest earth upheavals. There are thousands of these beds in Peru, and the deposits of auriferous gravel contained in them is enormous. They have been scarcely scratched either by the Indians, the Spaniards, or in later times. Some of them are of immense richness, and nearly all contain good pay dirt. The usual method employed, where any work is done, is to build a dirt conduit, carried from some stream with fall sufficient to gain a headway—water is everywhere abundant—and from this conduit or ditch, lower down but with the necessary height above the stream bed, to open sluices into the river bed. Water is then let into the conduit and rushes down the sluices, washing away the earth and leaving the gold-bearing gravel, which is collected and panned.

In Puno, the southeastern department of Peru, bordering on Bolivia, occur immense secondary deposits of a peculiar character. These lie in the provinces of Sandia and Carabaya. Raimondi, in his Minas de Oro del Perú, says that the mines of Carabaya are without doubt the oldest known in Peru, and that there is preserved the tradition of the finding in the placers at Inahuya of a great nugget shaped like a horse's head and weighing over 100 pounds, and of another great nugget, shaped like a man's head, found in 1556 in a crevice in the rocks.

The mineral locations of the province of Sandia, according to Raimondi, are Poto, Ananea, San Juan del Oro, Aporoma, Challuma, and the river Huarihuari; and of the province of Carabaya are Ollachea, Ayapata, Juata, Coasa, and Usicayos. . In nearly all of these districts are found evidences of ancient operations, although scarcely any of them are at present worked.

The reason for this is apparent. The native methods require almost unlimited quantities of water for sluicing down hillsides by the natural rush of the water. In Sandia Carabaya water, while in most places plentiful enough for ordinary hydraulic purposes, occurs in quantities far too scanty for practical use according to the native methods. On this account the whole territory lies practically virgin. The gold is found in great beds 10 to 100 feet or more in thickness and covering areas leagues in extent. The peculiarity of the formation is that the metal is found more or less evenly distributed throughout the mass of the bed from top to bottom. The earh, according to Raimondi, is usually ash-colored and stones are rough broken and not waterworn.

In speaking of the beds at Poto, which stretch from the snow mountains of Comuni and Ananea to the town of Poto, some 9 miles in extent, he says:

"Examining the auriferous ground at Poto various angular stones are seen which show not to have been worn by water and create the impression that the detritus has been thrown down in the midst of a great mud bank. Another observation in support of this hypothesis we have in the manner in which the gold is presented, which instead of being found in the lower part of the alluvial deposit is encountered disseminated throughout all the mass from the surface to the bottom, except in the places where a marly earth occurs in which the precious metal is not found."

Mr. C. Reginald Enock, an English mining engineer, in his work entitled "The Andes and the Amazon," devotes considerable attention to these deposits. He says:

"In the south of Peru there is an auriferous region which is probably one of the most important in the world, and it is remarkable that it is so little known elsewhere. This is the famous region of Sandia and Carabaya, provinces of the Department of Puno, and which I have spoken of elsewhere. The remarkable feature of this region is its geological and topographical formation and the considerable elevation at which portions of it are situated, spanning the main range of the Andes 15,000 to 17,000 feet altitude above sea level. Here are great deposits of gold-bearing material in the form of huge banks miles in extent. These are perhaps glacial deposits, moraines, and in some instances they form escarpments whose upper extremities are contiguous to, or rather are thrown off from, the very summits of the pepetual snow-capped range. One of these enormous banks, more than 2 leagues in length, has been worked at one end from time immemorial, and at present the material is being treated by hydraulic methods with 'monitors.' A theoretical calculation has been made of the gold contained in this moraine, if such it be, which results in a sum greater than the total value which has come out of California since the discovery of that country. This is the great bank of Poto.

"There is a series of these remarkable banks, and lower down and forming the plains at the immediate base of the snow-capped peaks of the Andes, are extensive plains, or pampas, whose material is a gold-bearing soil. Certain areas might be susceptible to profitable working by means of dredging or other well-known methods. These plains are at an elevation of about 15,000 to 16,000 feet, and the climate is not excessively rigorous except at certain seasons. I have slept in the open air on several occasions in this neighborhood, even at a higher elevation, and have experienced little inconvenience from the cold.

"These auriferous earths, at any rate in some cases, are of glacial formation. The stones they contain do not generally show the effect of attrition, such as in the deposits of waterworn gravel which occur at a much lower elevation in the same district, but are generally angular and rest in a position which shows that they have been deposited in quiet waters and have not traveled far from their place of origin to their final resting place. The mass of the material is a marly and ashen-hued earth; the stones or fragments of rock are of slate and quartz, the same material as the mountains upon which they rest. All along these extensive gold-bearing pampas are strewn blocks, generally small, of white quartz, which are very noticeable, as they are washed clean by the frequent rains and shine out from the gray soil of the plains.

"Alterbative to the supposition of the glacial formation of these enormous auriferous deposits in this region is the assumption that they are the result of action caused by the bursting of enormous lakes which had this sedimentary gold-bearing material below their waters. And this action has undoubtedly taken place in some cases, as the topographical conditions show. The waters of these former lakes seem to have forced a violent passage to the lower levels, destroying the rocks and carrying down the débris. The effect of such huge bodies of water released from considerable heights and descending the slopes of the Andes can be partly imagined, and the vast quantities of material which have been moved and its general disposition bears out this idea in a striking way."

The gold in Puno is generally about 0.970 fine, carrying silver about 0.025, with copper and iron in small proportions.

Almost everywhere throughout the Andean system in Peru and on both the eastern and western slopes are found primary gold deposits. These are somewhat similar to the quartz formations of Colombia, although the gold is ordinarily finer. The formation most usual is ferruginous quartz, The silver-bearing lodes of Peru are more apt to be distinct from the gold-bearing than is the case in Colombia.

BOLIVIA AND CHILE.

This bureau has received no official information relative to the production of precious metals in Bolivia and Chile for 1907, and in such cases it has been the custom of this bureau to accept the import figures of other countries from Bolivia and Chile plus their coinages as the probable production of those countries.

Bolivia is compelled to export through some port of Peru or Chile and consequently, does not get credit for her exports, at least we have been unable to find where any other country has received any gold or silver from Bolivia either in 1906 or 1907, thus making it almost impossible to separate Bolivia's product from Chile's.

Therefore we treat both countries as one in our estimates for 1906 and 1907.

The value of the imports of gold and silver bullion and ores into other countries from Chile was as follows:

Imported by—	1906.		1907.	
	Gold.	Silver (commercial value).	Gold.	Silver (commercial value).
France	....	$10,671	$3,637	$23,215
Germany	$23,800	147,818	....	218,008
Great Britain	159,512	1,510,182	137,171	992,817
United States	41,537	197,039	210,966	1,778,629
Total	224,849	1,865,710	351,774	3,012,669

These import figures represent, for 1906, 10,877 ounces, fine, for gold and 2,759,926 ounces, fine, for silver; for 1907, 17,017 ounces, fine, for gold and 4,564,650 ounces, fine, for silver.

During 1906 Bolivia coined 632,006 50-centavo pieces containing 228,594 fine ounces of silver, and Chile coined 3,343,136 50, 20, 10, and 5 centavo pieces containing 160,875 fine ounces of silver; a total consumption in coinage of 389,469 fine ounces of silver.

During 1907 Chile coined 12,417 gold 20-peso pieces, containing 4,385 fine ounces of gold, and 13,863,815 40, 20, 10, and 5 centavo pieces, containing 657,708 fine ounces of silver.

Adding the coinage to the exports, the production of Bolivia and Chile in fine ounces and value would be as follows:

Year.	Gold.		Silver.	
	Fine ounces.	Value.	Fine ounces.	Commercial value.
1906	10,877	$224,848	3,149,395	$2,128,991
1907	21,402	442,419	5,222,358	3,446,756

PRODUCTION OF GOLD AND SILVER IN BOLIVIA.

[From Bulletin of the International Bureau of the American Republics, March, 1908.]

There are many rich mines in Bolivia in which are found almost all the minerals known in the world. The mountains of Bolivia contain great veins of precious metals, constituting the most varied combinations, and these metals are exploited on a large scale. Owing, however, to the great scarcity of labor, as well as of capital and railroads, a complete exploitation can not be made. Notwithstanding these difficulties, it may be said that the mining industry in Bolivia is carried on in accordance with the latest improvements, and that the best miners in South America are to be found in the Republic. A writer has said that from a mining point of view Bolivia compares favorably with any other country. The copper deposits of Corocoro and the tin and bismuth mines are considered among the richest in the world.

The following are the minerals at present exploited on a large scale:

There are three aureferous regions in Bolivia containing gold in abundance. The first one extends from the eastern border of the Republic, in the basin of the Inambary, to the eastern frontier in upper Paraguay. This region comprises the whole mountainous zone of the provinces of Caupolican, Munecas, Larecaja, Cercodo, Yungas, Inquisivi, and Loayza of the Department of La Paz, continuing through the Department of the Cochabamba and extending through Santa Cruz.

Also the famous placers of the river San Juan del Oro, Suches, Tipuani, Cajones, and Chuquiaguillo; the mines of Araca, Yani, Cavari, Ayopaya, Arque, San Simon, San Javier, Sorotoco de Chiquitos, and others belonging to this group.

The second region begins in Lipez, continues through the southern part of the provinces of Chayauta, Sur Chichas, Department of Potosi, Mendez, Department of Tarija, Cinti y Acero in Chuquisaca, to the plains of Santa Cruz. In this region are located the veins and placers of Amayapampa, Suipacha, Esmoraca, Chuquichuqi, San Juan River, and the tributaries of the Guapay.

The third region, which is perhaps the richest of all, is not at present being exploited, but it extends to the northwest of the Republic to Corabaya in Peru, and the sources of the rivers Madre de Dios, Acre, and Purus.

From 1540 to 1759, a period of two hundred and twenty years, the Bolivian gold mines produced £420,000,000. From the latter date to the early part of the nineteenth century, the mines and placers of the provinces of Larecaja and Caupoliacan produced $14,000,000 gold, and from 1818 to 1868 they produced 150,776 ounces of gold. It is estimated that the output of the other mines and placers of the Republic, from the middle of the eighteenth until the latter part of the nineteenth century, amounted to £25,000,000.

Judging by the data obtained on the matter, the gold production in Bolivia in one year may be estimated at approximately 550 kilograms of gold, the official value of which is 275,000 bolivianos.

Silver abounds in nearly all of the territory of the Republic, and has made famous the Potosi hill, which from 1556 to 1651 produced 3,240,000 pesos to the Spanish Crown, derived exclusively from a tax amounting to one-fifth of the value of the product. It is well known that Bolivia has for a long time occupied the third place among silver-producing countries.

The western region is the richest, and the auriferous zone of the high plateaus, which constitute the immense plains to the north, the south, and the east, the silver ores occupy the upper part and crown the hills of the Andine Mountains from west to east.

There are more than 10,000 abandoned silver mines throughout the Republic, not including a great many which are at present being exploited. The cessation in exploiting the abandoned mines has not been caused by the exhaustion of the metal or any deficiency therein, but owing to the lack of capital or suitable means of the extraction of the water and other difficulties.

The Department of Potosi is the richest and most abundant in silver mines, and there are located therein the famous mining districts of Huanchaca, Aullagas, Colquechaca, Ocuri, Porco, Guadalupe, Potyugalete, Carguaicolo, Chorolque, Tomave, and Lipez, exclusive of other important concerns who are working mines in the Potosi hill, Andacaba, Chochacomani, Turqui, Unica, and other places.

The most important mines in the Department of Oruro are the Oruro, San Jose, Antequera, etc.; in Chuquisaca, the San Lucas, Huata, and Pojo mines; in Cochabamba, the Arque and Choquecamata, and the Colquiri in the Department of La Paz. The richest ores yield 8,000 marks per 2,300 kilos.

URUGUAY.

According to the Bulletin of the American Republics for July, 1908, "the French Mining Company at Cuñapiru treated 18,028 metric tons of ore, from which gold to the amount of 117.917 kilograms was obtained. The proceeds from gold sales were $51,883." This amount represents 2,510 ounces, fine, and is assumed to be the product of Uruguay for 1907.

ARGENTINA.

As usual, in estimating the production of precious metals for Argentina, recourse must be had to the importation figures of other countries.

Neither the United States nor Germany seem to have imported any bullion from Argentina during 1907, but the "Annual Statement of the Trade of the United Kingdom" for 1907 states that there were imported from Argentina 5,439 ounces of gold and 27,219 ounces of silver bullion (British standard), equivalent to 4,985 ounces, fine, valued at $103,049, gold, and 25,178 ounces, fine, at a commercial value of $16,617, silver.

THE MINING INDUSTRY OF THE REPUBLIC.

[From Bulletin of the International Bureau of the American Republics, May, 1908.]

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Silver exports of 3,443 kilograms, worth $1,722, are reported against none in the preceding year.

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Gold is found in Tierra del Fuego, and gold washing has been carried on for some time in a primitive manner. Recently, however, an English company has been formed for the purpose of extracting gold in a more systematic and up-to-date manner, and a modern plant with dredging and washing machinery is to be installed. Regular work at Neuquen is in the hands of a Buenos Aires company.

EUROPE.

Russia.

The American ambassador to St. Petersburg states that the gold product of Russia for 1907 was 2,450 poods, 36 pounds. This weight is equivalent to 1,290.754.48 ounces, fine, of the value of $26,682,263.

The silver product was 250 poods 35 pounds. This weight is equivalent to 132,122.09 ounces, fine, of the commercial value of $87,200.

FINLAND.

The "Industri-Statistik" of Finland for 1906 gives the following figures of the gold production for 1905 and 1906: 1905, 925 grams, of the value of 2,960 Finnish marks, and for 1906, 2,867 grams, of the value of 9,176 Finnish marks. These values reduced to United States money are as follows: For 1905, $571, and for 1906, $1,771, representing 27.62 and 85.67 ounces, fine, respectively.

LENA GOLDFIELDS, LIMITED.

A GREAT RUSSIAN MINE FOR ENGLISH CAPITAL.

[From The Mining Journal, London, July 18, 1908.]

That the greatest Russian gold-mining enterprise, the Lena gold field, was about to pass into English hands has long been an open secret, both in London and St. Petersburg, and there has been much speculation as to the magnitude of the results to be achieved by this famous property when attacked by British initiative and organization. The only limiting factor has been the condition of the mining market in London, which has been such that even an enterprise with a long and successful history of gold production could hardly be offered to it with confidence. The event foreshadowed by our Russian correspondent, whose information on Russian mining affairs is always singularly accurate and full, has taken place this week, and the Lena Goldfields (Limited) (formed for the purpose of acquiring the shares of the existing Russian company) has gone to flotation with a share capital of £1,405,000, in £1 shares, of which £236,500 is now offered for subscription at par.

The distinctive feature of this flotation, which marks it out from the great bulk of mining undertakings which are placed before the public, is, of course, that the shareholders acquire an actually producing mine. No one who at all understands the terms of the problem involved will be inclined to underrate the enormous differences which separate a mere prospect, however alluring its color and however decided the reports of the mining engineers on which its future is calculated, from a property which has written a definite record as a producer, and which for many years has continuously added its quota to the gold stock of the world. In this case one may, without transcending the limits of the strictest accuracy, go further, and say that, if a vast interval separates the producing mine from the prospect, an interval of even greater degree separates the Lena Goldfields from the great mass of producing mines all the world over. For, if Russia is not only the oldest but one of the greatest gold producers in the world, the Lena, as our St. Petersburg correspondent informed our readers in December last, "is the largest gold-mining enterprise in Russia." For the year ending October 13 last the production was valued at £843,000, while for the current year a substantially higher figure is expected. Its flotation is, therefore, undoubtedly one of the landmarks in the history of gold-mining enterprise directed from London.

The best commentary upon the magnitude of the proposition thus acquired is a bare recital of the figures of production and extent connected with the property. As a preliminary description it may be mentioned that the gold-bearing deposits occurring in the properties consist of gold-bearing gravels in ancient river beds and are worked, for the most part, as drift mines, the development and extraction of gravel continuing all the year round, while actual production of gold by washing goes on from May to October.

The properties consist of four different groups, known as Bodaibo, Nygri, Spectralny, Bodaibinski, comprising an area of 62,467 acres, or approximately 100 square miles. Of the four groups, the Bodaibo, as the result of extensive developments, is at present the most important. This group, whose gross yield of gold for the ten years ending October, 1906, amounted to £2,787,629, comprises 21,563 acres situated on the Bodaibo and other creeks, tributaries of the Vitim, the principal tributary of the Lena River. It lies 1,100 miles northeast of the town of Irkutsk, on the Trans-Siberian Railroad. Of the 21,565 acres only the claims situated in the valley of the Bodaibo proper, covering about one-third of this area, have been systematically worked and developed. It is this portion of the property from which the £2,787,629 referred to have been extracted and in which a working profit of £1,389,110, as estimated by the well-known engineer, Mr. Charles M. Rolker, remains. The remaining two-thirds, representing an area of 14,376 acres, have been partially prospected and proved to contain in places values equal to the average of the gravels of the developed portion of this group.

The Nygri group is situated 55 miles northeast of the Bodaibo property and comprises an area of 19,700 acres. The gross yield in gold of the mines of this group during the forty-four years ending October, 1906, has amounted to £8,400,000. Of the 19,700 acres comprising this group about one-half is still available for future prospecting and development, with a view to the extraction of its gold values. The Spectralny group is situated at the nearest point, about 100 miles northeast of the Bodaibo property, and comprises 4,286 acres. Prospecting during the past five years on this group has resulted in the discovery of rich gravel at several places, indicating that the expenditure of capital upon the development of these several points should open up rich ground, which view is confirmed in the instance of the Kulebrianik mine, included in the group where active development is taking place, with results which compare favorably, from the point of view of richness, with some of the richest of the Bodaibo gravels. The Bodaibinski group is situated to the south of and adjoins the Bodaibo property and comprises 16,916 acres. The gross yield of gold from this property during the thirty-five years ending October, 1906, amounted to £2,500,000.

Siberia, with its huge area of living and dead river systems, furnishes a remarkable instance of the natural processes of mineral concentration. For immeasurable centuries rivers have been at work eroding the ancient rocks and scattering the resultant débris broadcast over the leveling face of the country. The gold is derived from rocks of the first three members of the Paleozoic period, which cover a large portion of the area; Carboniferous and Permian rocks also occur, but are not, so far as is known, gold bearing. Silurian schists and gneisses occur in great abundance and there are smaller areas of igneous rocks, especially of the intermediate group. The placers are themselves of the Quaternary age, the gravels carrying pebbles of ancient schist and granite. Some of the placers are pre-Glacial, others post-Glacial. A remarkable parallelism exists between these placers and the Klondyke gravels.

Mr. C. W. Purington, in an interesting summary of the geological and economical aspects of the district in question, published in April of last year in The Mining Journal, said: "The district lying to the north of Bodaibinski, latitude 58° north, adjacent to the Vitim River and the Lena, is the richest part of the East Siberian alluvial gold field yet discovered.

"One of the most interesting features about the Lena district is the extraordinary thickness of the frozen gold-bearing alluvium. It is never less than 65 feet to bed rock, and is in some cases 290 feet.

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"The thickness of the pay gravel is, in general, between 2 feet 4 inches and 5 feet, rarely reaching 6 feet 6 inches. The width of pay gravel or the pay streak varies between 55 feet and 350 feet. The pay gravel or 'plast,' as the Russian word is, is a sand or clayey sediment of a muddy gray color, containing flat, angular pebbles of various rocks, especially of metamorphic schist, rarely quartz schist. The pyrite in the bed rock, of which the crystals sometimes attain one-fourth inch diameter, gives gray slime when the gravel is washed.

"The tenor in gold varies between wide limits, but is in the richest of the Lena placers, which are, undoubtedly, the richest yet found in Siberia, extraordinarily high. The lowest figure given is 1½ zolotniks to the 100 poods, corresponding to $3.24 per cubic yard. The high-grade pay runs 12 zolotniks to the 100 poods, or, say, $25 to the cubic yard. Between these limits there are all gradations, 6 to 8 zolotniks being common. The 3 to 6 feet of material which constitutes this rich pay is by far richer in its lowest layer and in the crevices of the bed rock. This bed rock, when thawed, is easily picked and disintegrated."

Mr. Rolker's report on the district, while it is in tenor much the same as that already quoted, calls attention to the fact that large areas of alluvial country in the district still remain unworked, and that recent prospecting work has shown that large areas of rich ground still remain to be attacked.

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MINING IN SIBERIA.

TROITZK AND ORSK GOLDFIELDS.

[From The Mining World and Engineering Journal, London, July 4, 1908.]

The difficulties of mining in Siberia are well illustrated by the reports of Troitzk Goldfields, Limited, and of Orsk Goldfields, Limited. These difficulties, however, are not insuperable, and the directors, particularly of Troitzk Goldfields, deserve great credit for the effectual way in which they have met them. They have been more successful than their confrères of the Orsk Goldfields, though the latter gentlemen have done all that was possible under a series of unfavorable circumstances. * * *

Reverting first to the Troitzk Goldfields, the accounts are from the commencement to January 13, 1908. The total gold output from all sources was 10,622 ounces, and the value £44,821.

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There is every reason to believe that payable ore exists in larger quantities at much greater depths. The general manager has accomplished an exceedingly creditable amount of work, 5,185 feet, and the sinking of the main shaft to the 500 and 600 levels is being pushed on with all speed. By the spring of 1909, he believes the ore reserves will amount to 72,000 tons, or a year in advance of the mill, on a 6,000 tons a month basis, for which the new reduction plant is designed. We note with pleasure that 6½ pennyweight ore will yield substantial profits, and further that the board considers that all initial difficulties have now been overcome, the prospects are decidedly encouraging. There will be no lack of working capital, as the Siberian Proprietary Company, which owns half the shares, has consented to advance on reasonable terms £30,000. The future of Troitzk Goldfields may, therefore, be considered as very reassuring.

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For the sum of £4,076 eleven alluvial mining claims on the Suvunduk River, near the Orsk mines, have been obtained and are being prospected. A very promising alluvial property in eastern Siberia has been acquired from the Russian Mining Corporation, which has been favorably reported upon by Mr. C. W. Purington, whose services have been secured as manager, and who will commence his duties early next month.

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NORWAY.

From the United States legation at Christiania we received the following information regarding the silver product of Norway for 1907: "The Konigsberg silver mines produced, from April 1, 1906, to March 31, 1907, 6,268 kilograms of fine silver." This represents 201,516 ounces, fine, of the commercial value of $133,000.

SWEDEN.

The report received from the United States minister to Sweden states that the product of gold and silver for 1907 was as follows:

Gold, 28.1 kilograms, and silver, 928.8 kilograms. This weight converted into fine ounces is, gold, 903 ounces, and, silver, 29.761 ounces, of the value of $18,675 and $19,642, respectively.

GERMANY.

According to official information received by this bureau, the refineries in the German Empire produced in 1907 gold to the amount of 4,682.35 fine kilograms from domestic ores, foreign ores, and domestic and foreign sweeps. The amount derived from foreign ores is ascribed to the country producing the ore, and that obtained from sweeps having already been taken up in the production figures, only the amount won from domestic ores, which amounted to 100.14 kilograms, is credited to Germany as production. The value of the yield was, therefore, $66,553, which represents 3,220 fine ounces.

The total yield of silver by the refineries in 1907 was 386,932.54 fine kilograms, derived from the following sources:

	Kilograms.
Domestic ores	158, 260. 83
Foreign ores	165, 193. 14
Domestic and foreign sweeps	63, 478. 57

For the reasons given above, only the silver obtained from domestic ores is regarded as new production, consequently Germany's yield of silver in 1907 is placed at 158,260.83 fine kilograms, or 5,088,086 fine ounces, of the market value of $3,358,137 at the average New York price of silver per fine ounce in 1907.

AUSTRIA-HUNGARY.

The American chargé d'affaires at Vienna reports that the Austrian and Hungarian production of the precious metals for 1907 was:

Gold.—Austria, 239.016 kilograms, fine; Hungary, 3.500 kilograms, fine; a total of 3,739.016 kilograms, or 120,209 ounces, fine, valued at $2,484,941.

Silver.—Austria, 42,382.975 kilograms, fine; Hungary 11,870 kilograms, fine; a total of 54,252.975 kilograms, representing 1,744,233 ounces, fine, of the commercial value of $1,151,194.

GREAT BRITAIN.

No official information has been received by this bureau regarding the product of precious metals in Great Britain during 1907; the product for 1906 is therefore repeated as follows:

Gold, 44 kilograms, fine, representing 1,414 ounces, fine, with the value of $29,200.

Silver, 4,268 kilograms, fine, representing 137,216 ounces, fine, of the commercial value of $90,563.

GREECE.

In the absence of any official information regarding the production of silver in Greece during 1907 the figures for 1905 are repeated, viz, 25,786 kilograms, or 829,025 ounces, fine, of the commercial value of $547,157.

FRANCE.

The United States ambassador at Paris reports that during the calendar year 1906 there were produced in France 756 kilograms, fine, of gold, valued at 2,604,000 francs, and 22,378 kilograms, fine, of silver, valued at 2,685,000 francs. This represents 24,305.40 ounces, fine, of gold, valued at $502,437, and 719,452.70 ounces, fine, of silver, of the commercial value of $474,839. In the absence of any official figures for 1907 these figures are repeated.

SPAIN.

The secretary of the United States legation at Madrid reports that the silver product of Spain for 1907 was 127,435 kilograms, fine, valued at 14,264,852 pesetas. This is equivalent to 4,097,035 ounces, fine, of the commercial value of $2,704,043.

ITALY.

The United States ambassador reports that Italy produced in 1907 60 kilograms of gold, valued at 205,000 lire. This value is equivalent to $39,565 in United States money, representing 1,914 ounces, fine.

The silver produced was 22,950 kilograms, valued at 2,547,002 lire. This weight represents 737,843 ounces, fine, of commercial value of $486,976.

TURKEY.

The American ambassador at Constantinople reports the production of precious metals in Turkey during 1907 to have been 6.719 kilograms of gold and 2,094.887 kilograms of silver. These figures are equal to 216 ounces, fine, of gold and 67,351 ounces, fine, of silver, of the value of $4,465 and $44,452, respectively.

SERVIA.

No official information has been received from Servia stating the product of gold for 1907. The figures for 1906 are therefore repeated, viz, 90 kilograms of fine gold, valued at $59,814, representing 2,893 ounces, fine.

ASIA.

CHINA.

China publishes no statistics of her production of gold, and during the last two years, in order to form an estimate therefor, this bureau has had recourse to China's net exports of bullion and dust, but when we consider, as has been stated, " that fully three-quarters of the gold coin imported was melted into bars and sent away to Europe, either directly or through Hongkong," we see how worthless such figures are as a basis upon which to estimate China's product of gold.

In the absence of any official information on the subject we return to our estimate for 1904, viz, $4,500,000, representing 217,688 ounces, or 6,771 kilograms, fine.

GOLD PRODUCTION OF CHINA.

By Thomas T. Read, *Professor of Mining and Metallurgy, Pei-Yang University, Tientsin, China.*

[From the Engineering and Mining Journal, New York, June 27, 1908.]

In the Mineral Industry for 1906 the production of gold for the whole of China was estimated at $4,500,000, while the same volume also quoted a Japanese estimate that the annual production of Manchuria alone was $10,000,000. This illustrates the degree of accuracy at present possible. As previously stated, the production is the aggregate of innumerable small producers, whose interest it is to conceal the actual amount as much as possible. Knowledge of the deposits is almost equally meager. In Manchuria gold is widespread, both in alluvial deposits and numerous small quartz veins, from which the former have been derived. These are worked, the former by panning, the latter by heating and quenching the ore to make it brittle, grinding in stone mills, and panning the ground product. The methods used bear striking similarity to those used in Europe in the fifteenth century.

The industry does not flourish as much as it might, for the country is infested with bandits, who relieve the miner of his winnings and not infrequently of his life. Since the close of the war policing of the country is rapidly progressing, and the production should rapidly increase also.

In Shantung gold exists at various places, the best known being at Ping-tu, where there is a large and valuable deposit of gold-bearing pyrite. This was formerly worked by stamp-milling and amalgamation, but on reaching the zone of unaltered sulphides, this did not give a satisfactory extraction and the mine is now closed down. What "improved methods" in China have to contend with is shown by the fact that the concentrates after having been re-treated could still be sold to the native farmers, who carried them home and occupied their time in the winter by regrinding and panning them.

Gold is known to occur in Kansu, and there are quartz veins in the upper valley of the Han-ho in Shensi. There is a small amount of gold washing along the Han-ho in Hupeh. Mines were formerly worked in the southern part of Anhwei. There are deposits in Hunan and Kuangsi, but they are not much worked. There are said to be valuable mines in Kuangtung. Gold occurs in Ssüchuan, but knowledge of this very valuable mineral province is extremely scanty.

GOLD MINING IN MONGOLIA.

[From the Mining Journal, London, October 17, 1908.]

The correspondent of the Peking and Tientsin Times at Urga, according to our contemporary, the Far Eastern Review, gives the following account of the position of gold mining enterprise in Mongolia:

"A little over eight years ago Mr. V. von Grot, then commissioner of I. M. C., stationed at Peking, resigned the service, and, in his quality of a Chinese official of the third class, obtained the permission of the Chinese Government to work the gold mines in the T'u-she-t'u and Tse-tseng khanates in northern Mongolia. To supply the necessary funds a limited company was formed under the title of 'Société Anonyme Minière des Aimaks de Tou-che-tou-khan et de Tse-tsen-khan en Mongolie,' with a capital of 3,000,000 rubles. The work began (and is carried up to the present time) only in two places: On the river Iro (about 100 kilometers southeast of Kiachta and 200 kilometers north of Urga) and on the river Terel-chih (about 180 kilometers northeast of Urga), both places situated in the T'u-she-t'u khanate. The first year's working was rather disappointing, as the mining engineers, specially obtained from America, proved to be not of much value in Mongolia, as, while drawing high salaries, they did not succeed in extracting sufficient amount of gold to cover the running expenses, to say nothing of any profit. The costly machinery and other mining appliances imported at a very great expense from different countries, mostly from America, were also totally unsuitable for Mongolia, and so the greater part of the capital subscribed melted away, having brought no satisfactory result to the company. After this unsuccessful attempt the company decided not to work the mines themselves, but to lease the gold-bearing areas to private diggers, thus saving themselves the heavy expenses, and satisfied with only the rent. Mr. Von Grot himself leased the Terel-chih mine. The result was more satisfactory, and the amount of gold extracted was, in 1906, 454 pounds (Iro 400 pounds, value about $200,000, and Terel-chih 54 pounds, value about $27,000), and in 1907, 703 pounds (Iro 570 pounds, value about $285,000, and Terel-chih 133 pounds, value about $66,500). This year, up to the present, the output of both mines was 103 pounds (Iro 75 pounds, value about $37,000, and Terel-chih 28 pounds, value about $14,000). Now Mr. Von Grot has started work on two new mines—Kersa, on the river Vere-ya, near the Russian frontier, in T'u-she-t'u khanate, and Tsu-tsa, on the river Onon, also in close proximity to the Russian frontier, in the Tse-tseng khanate; both mines being supposed to be very rich in gold, as they form a continuation of a rich auriferous stream passing through the southern Za-bay-kal-ye. Mr. L. Bates, mining engineer, who went to that part of Siberia a couple of months ago in the interests of an Anglo-American syndicate, has made a very favorable report on that region. Prospects seem to be very bright, and Mr. Von Grot hopes that next year the total output of the four mines will not be less than 50 puds—i. e., 1,800 pounds, of the value of about $900,000.

JAPAN.

From the Eighth Financial and Economic Annual of Japan for 1908 we obtain the following figures, showing the production of gold and silver in Japan and Formosa for the years 1905 and 1906:

Year.	Gold.			Silver.		
	Momme.[a]	Fine ounces.	Value in United States currency.	Momme.[a]	Fine ounces.	Value in United States currency.[b]
1905.						
Japan proper	812,764			22,103,408		
Formosa	420,000					
Total	1,232,764	148,625	$3,072,351	22,103,408	2,664,842	$1,625,554
1906.						
Japan proper	726,743			20,985,741		
Formosa	376,242					
Total	1,102,985	132,979	2,748,920	20,985,741	2,530,093	1,710,343

[a] The momme is equivalent to 57.87 grains.
[b] Commercial value.
[c] Product of 1906.

The American ambassador at Tokyo sends us the following figures for the product of Japan during 1907, exclusive of Formosa:

Items.	Gold.			Silver.		
	Momme.[a]	Fine ounces.	Value in United States currency.	Momme.[a]	Fine ounces.	Value in United States currency.[b]
Japan proper	735,708			23,519,189		
Formosa	[c]376,242					
Total	1,111,950	134,059	$2,771,245	23,519,189	2,835,532	$1,871,451

[a] The momme is equivalent to 57.87 grains.
[b] Commercial value.
[c] Product of 1906.

INDO-CHINA.

The United States minister at Paris submits the following figures as representing the production of gold in Indo-China during 1906: Forty-four kilograms, valued at 149,000 francs, equivalent to $28,757, representing 1,391 ounces, or 43 kilograms, fine.

KOREA.

From the "Eighth Financial and Economic Annual of Japan for 1908" we find the following figures showing the exports of gold from Korea, expressed in yen, which we assume to have been the amount of gold produced in Korea for the years given below. The value of yen in United States money and the amount of fine ounces representing the same is as follows:

Year.	Value.	Value in United States currency.	Weight.
	Yen.		*Fine ounces.*
1905	5,206,805	$2,592,989	125,436
1906	4,584,243	2,282,953	110,438
1907	4,359,043	2,170,803	105,013

SIAM.

The chargé d'affaires of the American legation at Bangkok gives, as a rough estimate of the gold product of Siam during 1907, 250 kilograms, or 8,037.50 ounces, at a valuation of $166,150.

BRITISH INDIA.

The United States consul-general at Calcutta reports the gold product of British India for 1907 to have been 17,307 kilograms of standard gold, the gross market value being £2,133,691, equivalent to $10,383,607 in United States money, representing 502,307 ounces, fine.

INDIAN GOLD MINING.

[From The Economist, London, April 4, 1908.]

Until the discovery of the Rand the Kolar gold field of India was probably the largest and most consistent producer of the precious metal in the world, and though it has now been overshadowed by the enormous development of the great South African field, and temporarily rivaled by the West Australian discoveries, it still remains a very important contributor to the world's gold supply, and the shares of the companies engaged in exploiting it are of great interest to investors, and have hitherto been very profitable to their possessors. The fortunes of one or other of the mines have from time to time been obscured by reports of a "fault," of a deterioration in the average value of the ore, of fires in the workings, strikes of the miners, and other alarms to which the industry of gold mining is particularly liable. Some of the mines are less flourishing at the present time than they were, owing to one or other of these causes, but, on the whole, the five producing mines are able to show a fine record of gold produced and dividends paid for a number of years past. Each of the annual reports gives commendably ample information on points of interest to the shareholder, actual and prospective, and from the tables supplied we extract the subjoined particulars relating to the progress of each of the five mines in the past five years:

Year.	Mysore.	Nundy-droog.	Ooregum.	Champion. Reef.	Balaghat.
Quartz milled:	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
1903	172,770	66,860	141,755	173,629	31,885
1904	191,000	75,840	127,449	181,948	36,000
1905	195,650	79,070	121,779	215,167	48,820
1906	185,900	81,750	122,537	203,174	53,750
1907	194,838	84,000	124,160	179,243	55,850
Tailings treated:					
1903	126,646	60,772	....	246,300	24,800
1904	154,833	60,409	....	241,996	28,560
1905	165,491	74,653	122,491	177,000	33,000
1906	158,848	83,854	113,222	207,143	43,031
1907	167.529	83,970	89,164	241,003	50,232
Standard gold obtained:	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*	*Ounces.*
1903	193,185	67,912	81,408	201,139	26,942
1904	202,392	66,295	71,059	210,096	31,527
1905	207,050	68,161	63,847	212,204	42,210
1906	208,188	69,947	66,580	174,265	45,978
1907	210,910	72,295	71,399	128,497	34,094
Value:					
1903	£751,417	£264,458	£317,050	£782,757	£104,839
1904	787,133	258,155	276,716	817,289	122,666
1905	804,456	265,251	248,506	825,263	164,204
1906	809,413	272,385	259,251	678,706	178,899
1907	820,115	283,139	278,898	500,189	132,673

In the past year the Mysore and Nundydroog each crushed more stone, treated a larger quantity of tailings and won more gold of a higher value than in any year of the five quoted, with the exception that Mysore milled a larger quantity of quartz in 1905 than in 1907, though more gold was obtained in the later year. Ooregum also obtained better results than in any year since 1903, and this mine seems to be recovering from one of the temporary setbacks that happen from time to time. Champion Reef and Balaghat, however, are experiencing a reverse which, it may be hoped, will also prove temporary. They are both exploiting new ground, and the directors remark that a previous experience in other parts of the Kolar gold field justifies the hope that new bodies of payable ore will soon be discovered. The shareholders will hope so too, but in the meantime there is an element of uncertainty in the future of these mines which is reflected in the market value of the shares. The announcement by the Champion Reef Company of an interim dividend of only twopence per share, against fourpence at this time last year, is not calculated to relieve the anxiety as to the immediate outlook for the company.

EAST INDIES.

BRITISH EAST INDIES.

No information has been received regarding the gold production of British New Guinea for 1907; therefore the figures for 1906 are repeated, viz, 19,768 fine ounces, valued at $408,728.

BRITISH NORTH BORNEO.

The production of gold in Sarawak, British North Borneo, for the last three years was as follows:

Year.	Weight.	Value.
	Ounces.	
1905	44,299	$915,742
1906	39,186	810,047
1907	41,751	863,070

FEDERATED MALAY STATES.

The vice and deputy consul-general in charge at Singapore reports that the gold product of the Federated Malay States for 1907 was 435.645 kilograms, fine, equal to 14,006 ounces, fine, with the valuation of $289,530.

The total gold production in British East Indies for 1907 was 75,525 ounces, fine, with a value of $1,561,328.

GOLD PRODUCTION OF THE FEDERATED MALAY STATES.

Year.	Perak.			Negri Sembilan.		
	Ounces.	Value in sterling at £3 17s. 6d. per ounce.	Fine ounces at £4 4s. $11\frac{5}{11}$d. per ounce.	Ounces.	Value in sterling at £3 17s 6d. per ounce.	Fine ounces at £4 4s. $11\frac{5}{11}$d. per ounce.
1898	(a)	(a)	(a)	(a)	(a)	(a)
1899	(a)	(a)	(a)	(a)	(a)	(a)
1900	(a)	(a)	(a)	(a)	(a)	(a)
1901	[b] 764.41	£2,962.20	697.20	576.50	£2,233.19	525.90
1902	[b] 548.43	2,125.30	500.20	198.80	770.70	181.30
1903	[b] 645.06	2,499.12	588.40	2,370.90	9,187.50	2,162.80
1904	[b] 1,669.05	6,467.11	1,522.50	2,150.70	8,333.19	1,961.90
1905	[b] 1,799.92	6,974.14	1,642.00	311.20	1,205.18	283.80
1906	[b] 1,057.52	4,097.18	964.70	410.60	1,591.10	374.50
1907	[c] 1,032.49	4,000.18	941.80	32.20	136.40	32.00

Year.	Pahang.			Total.		
	Ounces.	Value in sterling at £3 17s. 6d. per ounce.	Fine ounces at £4 4s. $11\frac{5}{11}$d. per ounce.	Ounces.	Value in sterling at £3 17s. 6d. per ounce.	Fine ounces at £4 4s. $11\frac{5}{11}$d. per ounce.
1898	22,200,00	£86,025.00	20,251	22,200.00	£86,025.00	20,251.0
1899	18,507.00	71,714.12	16,883	18,507.00	71,714.12	16,883.0
1900	17,048.00	66,061.00	15,552	17,048.00	66,061.00	15,552.0
1901	23,948.00	92,798.10	21,846	25,288.91	97,994.11	23,069.0
1902	19,554.00	75,771.15	17,838	20,301.23	78,677.50	18,519.0
1903	12,579.00	48,743.13	11,475	15,594.96	60,430.10	14,226.0
1904	18,200.00	70,525.00	16.603	22,019.75	85,326.10	20,087.0
1905	9,661.10	37,436.00	8,813	11,772.22	45,616.12	10,739.0
1906	10,727.75	41,570.00	9,785	12,196.00	47,258.19	11,125.0
1907	[d] 14,286.14	55,358.16	13,033	15,353.83	59,495.18	14,006.8

[a] No figures available.
[b] Not exported; reported to have been bought by gold buyers in Tapale.
[c] Not exported; reported to have been bought by gold buyers in Tapah.
[d] 1,270.59 ounces of gold produced at Kuala Lipis not exported.

[From The Board of Trade Journal, London, October 22, 1908.]

The following account is taken from the resident-general's annual report for 1907:

* * * * * * *

The export of gold in 1907 amounted to 15,353 ounces, valued at $526,388 (£61,412), of which 14,286 ounces were from Raub. The quantity of ore crushed at Raub was 70,821 tons, yielding 12,864 ounces of gold. The returns from Raub during the year show a marked improvement, but this is all that can be said. The Batu Bersawah mine, in Negri Sembilan, shut down early in 1907.

DUTCH EAST INDIES.

According to the London Mining Journal of February 29, 1908, the gold product of Dutch East Indies for 1907 was valued at

$1,646,249, representing 79,637 ounces, fine, and for 1906, $1,254,900 representing 60,706 ounces, fine.

From the same source the production of silver in 1907 is taken as 322,560 ounces of the commercial value, at the average New York price of silver for the year, of $212,890; and for 1906, 248,240 ounces, with the commercial value, at the average price for 1906, of $167,810.

MINES OF UPPER (NORTH) GUINEA.

[From L'Economiste Francais, Paris, April 4, 1908.]

The gold which is found in Guinea is in veins produced from eruptive rocks and in placers. These last comprise productive beds consisting of gravels, sands, various clays, etc. The gold is distributed thickly in all of the strata, of which the smaller beds are richest. In the greater part of the auriferous deposits the gold is in the form of plates or scales and is very winding. The metal is of detrital origin proceeding from pebble quartz broken away from preexistent veins. The diversity of the holding is very large and one encounters pockets containing "pips" of different sizes.

It is very easy to form an idea of the future prospects which are in store for our colony from the auriferous exploitation, in knowing and understanding that the repositories are estimated at 80,000 kilometers, square, being 8,000,000 hectares (French measurement, 1 hectare is equivalent to 2 acres, 1 rood, 35 perches), corresponding to about one-sixth of the whole surface of France. It is proven that gold mines richer than those of West Africa are situated in French Guinea.

AUSTRALASIA.

GOLD.

According to the Annual Report of the Under Secretary for Mines in Queensland, 1907, the production of gold in the several Australasian States was as follows:

State.	Weight.	United States value.
	Fine ounces.	
New South Wales	247,363	$5,113,447
New Zealand	477,312	9,866,915
Queensland	465,882	9,630,636
South Australia	11,871	245,395
Tasmania	65,354	1,350,987
Victoria	695,576	14,378,832
Western Australia	1,697,553	35,091,535
Total	3,660,911	75,677,747

The total value of the gold product for the year amounted to $75,677,747, a decrease in the product as compared with that of 1906 of $6,712,735.

SILVER.

As half of the silver product of Australasia is exported in the form of concentrates, silver-lead ores, etc., it has been exceedingly difficult to determine the amount of silver in the exports.

The following figures are estimates made by the deputy master of the Melbourne branch of the royal mint, given in tabular form in the

Thirty-eighth Annual Report of the Deputy Master and Comptroller of the Mint, London, 1907:

State.	Weight.	Commercial value.
	Fine ounces.	
New South Wales	12,149,682	$8,018,790
New Zealand	1,562,603	1,031,318
Queensland	921,497	608,188
South Australia	....	....
Tasmania	4,221,762	2,786,363
Victoria	38,222	25,226
Western Australia	189,265	124,915
Total	19,083,031	12,594,800

The total product of silver in fine ounces was 19,083,031 as against 14,237,246 in 1906, an increase of 4,845,785.

WESTERN AUSTRALIA.

According to the report of the deputy master of the Melbourne branch of the royal mint the gold product of Western Australia for 1907 was 1,697,553 ounces, fine, valued in United States money at $35,091,535.

The production of silver was 189,265 ounces, fine, of a commercial value of $124,915.

VICTORIA.

The deputy master of the Melbourne branch of the royal mint reports that the product of gold in Victoria for 1907 was 695,576 ounces, fine, valued at $14,378,832, and the silver, 38,222 ounces, fine, at a commercial value of $25,226.

QUEENSLAND.

The Annual Report of the Under Secretary for Mines in Queensland, 1907, gives the gold product at 465,882 ounces, fine, valued at $9,630,636, and the silver at 921,497 ounces, fine, at a commercial value of $608,188.

SOUTH AUSTRALIA.

The Annual Report of the Deputy Master of the Melbourne branch of the royal mint states that the gold product of South Australia in 1907 was 11,871 ounces, fine, which gives a value of $245,395.

NEW ZEALAND.

The Annual Report of the Deputy Master of the Melbourne branch of the royal mint for 1907 gives the product of gold for New Zealand at 477,312 ounces, fine, which gives a value of $9,866,915.

The silver product is estimated to have been 1,562,603 ounces, fine, of a commercial value of $1,031,318.

TASMANIA.

From the same source of information the gold product for Tasmania is given as 65,354 ounces, fine, valued at $1,350,987.

The figures for the silver product were obtained from the American consul at Hobart, who reports that 89,762.50 tons of silver-lead was produced, valued at £572,560; this is equivalent in United States money to $2,786,363, representing 4,221,762 ounces, fine.

New South Wales.

The Annual Report of the Department of Mines, New South Wales, 1907, gives the following production figures for that State in the said year: Gold, 247,363 ounces, fine, of a value of $5,113,447, and silver bullion refined in Australia, 5,921,457 ounces, fine, and silver, unrefined, exported in ores, concentrates, etc., as 6,228,225 ounces, fine.

SILVER-LEAD AND ZINC.

[From the Annual Report of the Department of Mines, New South Wales, for the year 1906.]

The following statement shows the estimated net value of the products of the silver-lead mines of the State for the years 1904, 1905, 1906, and 1907:

Description.	1904.	1905.	1906.	1907.
Silver, silver-lead, concentrates, ores, etc	£2,065,540	£2,494,052	£2,862,973	£3,915,946
Lead (pig, etc.)	65,964	[a] 2,657	[a] 1,084	371,182
Zinc (metal and concentrates)	117,978	221,155	292,806	536,620
Total	2,249,482	2,717,864	3,156,863	4,823,748

[a] The Sulphide Corporation, the only company smelting silver-lead ores in this State during these years on any scale, exported all its bullion as silver-lead, the refining being done abroad. The product is therefore classed under heading "Silver-lead."

The production for 1907 thus shows an increase of £1,669,885 in value over that for the previous year, and the statement illustrates the remarkable progress made since the year 1904.

In explanation of the values quoted it has to be stated that the metallic contents of the major portion of the output from our silver-lead mines is extracted outside the confines of New South Wales, and that it is considered that this State is not entitled to take credit for the full value of the finished product. The value of the output is, therefore, arrived at by taking the net value of the ore concentrates, bullion, etc., as declared by the several companies to the customs department at the date of export from this State.

Particulars as to the exact quantity and value of the metals obtained from the silver-lead ores mined in this State have, however, been collected independently from the various mining and smelting companies, ore buyers, etc.

The following statement, therefore, shows the quantity and value of the silver, lead, and zinc obtained during the year 1907 from ores mined in this State:

Metals.	Quantity.	Value.
Silver ounces	5,921,457	£795,982
Lead tons	79,870	1,408,818
Zinc do	984	23,620
Total		2,228,420

In addition 337,823 tons of concentrates were exported to Great Britain and the Continent of Europe, the value obtained for same being £3,574,775. The estimated gross metallic contents, based on average assays is given hereunder, but it is, of course, impossible to say what proportion of the same was recovered in the case of the zinc contents. The quantity has only been estimated where payment is allowed for same.

Silver	ounces	6,228,225
Lead	tons	111,830
Zinc	do	76,645

The actual value accruing to the Commonwealth (the separation of the metals being carried out in other States besides New South Wales) from the silver and silver-lead mines of this State during the year 1907 was, therefore, £5,803,195.

The output for the period under review has been furnished principally by the mines on the Broken Hill Field, where, owing to the favorable metal market, the greatest activity prevailed throughout most of the year. Work was continuously carried on and was free from interruptions of the nature which checked operations in the early part of the preceding year, viz, underground fires and "creeps." The high price of lead which ruled at the opening of the year induced the companies to enter upon a vigorous policy of development and to effect many improvements and additions to the surface plants. It is gratifying to be able to record that work at the deep levels has proved that the size of the ore bodies, as well as their metallic values, are well maintained and, despite the extensive output of 1907, most of the mines are able to report large additions to their ore reserves. The gross value of the output by the companies on this field during the year was £5,111,815, and dividends totaling £1,055,500 were paid. This brings the total value of the output of the Broken Hill Field to over £51,910,415 and the amount returned to shareholders £15,333,435.

A considerable increase is shown in the quantity and value of the zinc concentrates exported. Exhaustive trials were continued during the year at Broken Hill with the object of arriving at a successful solution of the difficulty experienced in the economic treatment of the zinciferous tailings, and the results obtained are such as to justify the hope that the experimental stage has at last been passed.

Respecting the other silver mines of the State, it can be said that the output from the Yerranderie field was on a much larger scale than in former years, and is such as to demonstrate the future possibilities of this field. The Conrad stannite mines at Howell also records a well-augmented production, and the importance of this company is shown by the fact that, on an average, it provided employment for 500 men during the year.

The following figures show the quantity and value of silver, silver-sulphide, silver-lead ore, etc., the product of this State, exported in 1907:

Silver: 2,043,887 ounces, value £257,314; ore, concentrates, etc., 413,719 tons 11 hundredweight; silver sulphide and silver-lead, 20,359 tons 8 hundredweight, value, £3,658,632; total value, £3,915,946.

YIELD OF SILVER.

During the year the deputy master of the Melbourne branch of the royal mint drew attention to the fact, which has long been patent to this department, that owing either to the silver contained in the ores mined at Broken Hill having been mostly extracted in another State or having been contained in the concentrates forwarded to Europe for treatment, the foregoing figures showing the silver obtained in New South Wales give a very inadequate idea of the prominence of the State as a silver producer. The deputy master reported that he had therefore made an attempt to arrive at a reliable estimate of the silver production of this State. The data which he had collected from several sources were submitted to this department, and after careful investigation an estimate was agreed upon. Through the courtesy of the deputy master this estimate has been made available for publication, and while it is given purely as an estimate, it is believed to be a very close approximation of the actual yield of silver secured from the mines of this State.

STATEMENT SHOWING THE QUALITY AND VALUE OF THE SILVER YIELDED BY THE MINES OF NEW SOUTH WALES.

Year.	Refined in Australia.	Value.	Exported unrefined and in concentrates.	Value.	Total production.	Total value of production.
	Fine ounces.		*Fine ounces.*		*Fine ounces.*	
1903	6,489,689	£723,513	1,736,512	£193,598	8,226,201	£917,111
1904	7,751,667	920,947	2,945,058	349,891	10,696,725	1,270,838
1905	6,804,934	852.533	3,480,561	436,050	10,285,495	1,288,583
1906	5,575,410	775,409	3,111,013	432,669	8,686,423	1,208,078
1907	5,921,457	795,982	6,228,225	845,845	12,149,682	1,641,827

AFRICA.

In 1907 the total gold product of Africa was 7,338,468 ounces, fine, of the value of $151,699,575, an increase over the year 1906 of $16,341,568.

The product of silver was 790,431 ounces, fine, of the commercial value of $521,685.

The subjoined table shows whence the output has been derived since 1889:

Year.	Transvaal.		West Coast.		French colonies.[a]		Rhodesia.[b]		Total.	
	Weight.	Value.	Weight.	Value.	Weight.	Value.	Weight.	Value.	Weight.	Value.
	Kilos.		*Kilos.*		*Kilos.*		*Kilos.*		*Kilos.*	
1889..	11,719	$7,788,372	1,270	$844,262	261	$173,461	(c)	....	13,250	$8,806,095
1890..	15,706	10,438,356	1,062	705,705	261	173,461	(c)	....	17,029	11,317,522
1891..	22,398	14,885,639	1,289	856,730	261	173,461	(c)	....	23,948	15,915,830
1892..	31,938	23,220,108	1,528	1,011,924	[d] 261	173,461	(c)	....	36,722	24,405,493
1893..	42,573	28,293,831	977	649,695	261	173,461	(c)	....	43,811	29,116,987
1894..	59,730	39,696,330	865	574,653	261	173,461	(c)	....	60,856	40,444,444
1895..	66,045	43,893,300	995	661,630	261	173,461	(c)	....	67,301	44,728,391
1896..	65,874	43,779,669	945	627,938	261	173,461	(c)	....	67,080	44,581,068
1897..	86,720	57,633,861	751	499,311	640	425,510	(c)	....	88,111	58,558,682
1898..	119,190	79,213,953	518	313,928	189	125,987	669	$444,617	120,566	80,128,485
1899..	107,410	71,384,561	422	280,185	344	228,512	1,700	1,129,773	109,876	73,023,031
1900..	9,215	6,124,226	326	216,873	1,115	741,029	2,392	1,589,815	13,048	8,671,943
1901..	8,026	5,333,994	216	143,813	958	636,700	4,476	2,974,943	13,676	9,089,450
1902..	52,514	34,901,140	109	6,552	1,127	748,976	5,065	3,366,561	58,716	39,023,725
1903..	92,468	61,454,439	2,028	1,347,845	1,701	1,130,358	6,117	4,065,489	102,314	67,998,131
1904..	117,371	78,004,559	2,544	1,690,770	2,143	1,424,340	7,214	4,794,208	129,272	85,913,881
1905..	152,707	101,489,199	4,351	2,891,928	2,312	1,536,353	11,040	7,337,211	170,410	113,254,691
1906..	179,986	119,618,507	6,426	4,270,685	2,086	1,386,068	15,171	10,082,747	203,669	135,358,007
1907..	200,665	133,361,943	8,456	5,620,248	2,285	1,518,203	16,851	11,199,181	228,257	151,699,575

[a] Includes Madagascar, Algeria, and the French Sudan. For 1903 and 1904, Madagascar only. For 1905, figures for Madagascar and Egypt. For 1906 and 1907, Madagascar and Egypt for 1905 repeated.

[b] Includes Mozambique, Cape Colony, and Natal for all years except 1901, which does not include product of Mozambique or Natal. For 1903, includes Rhodesia, Cape Colony, and Natal. For 1904 and 1905, Rhodesia, Cape Colony, and Mozambique. For 1906 and 1907, Rhodesia, Cape Colony, Mozambique, Natal, and Bechuanaland.

[c] Previous to 1898 Rhodesia and Mozambique together produced 289 kilograms, fine, included in the Transvaal returns.

[d] Previous to 1897 the only figures obtainable were those for 1892—Madagascar only.

TRANSVAAL.

According to the London Mining Journal of April 18, 1908, the Transvaal in 1907 produced gold to the value of £27,403,738, or $133,360,291, equivalent to 6,451,384 fine ounces, which is an increase of 664,767 ounces over the production of 1906. The mines of the Witwatersrand yielded 6,220,227 and the outside districts 231,157 ounces. The production during the last five years was as follows:

1903	£12,589,247
1904	16,054,809
1905	20,802,074
1906	24,579,987
1907	27,403,738

It will be seen that the year's production reached the total of £27,403,738, a record unequaled by any other gold-producing country in the world.

The London Mining Journal for March 28, 1908, submits the following figures for the silver product of the Transvaal for 1907:

NOTE.—The figures shown below have been taken from the government mining engineer's statistics.

Month.	Weight.	Value.
1907.	*Ounces.*	
January	58,982	£7,829
February	53,508	7,066
March	58,594	7,704
April	59,593	7,733
May	56,458	7,366
June	54,283	7,084
July	58,134	7,541
August	60,350	7,787
September	58,192	7,613
October	59,433	7,779
November	60,319	7,573
December	62,189	7,535
Total	700,035	90,610

The value of this product, viz, £90,610, reduced to United States money is $440,954, which represents, at the average New York commercial price of silver for the year ($0.66), 668,111 ounces, fine.

WEST AFRICA.

The London Mining Journal for April 18, 1908, gives the gold product of West Africa for 1907 at 293,218 ounces, valued at £1,154,885, equivalent in United States money to $5,620,248, representing 271,879 ounces, fine.

MADAGASCAR.

The London Mining Journal of October 10, 1908, reports the gold production of Madagascar for the last three years to have been as follows:

MONTHLY GOLD PRODUCTION.

Month.	1905.	1906.	1907.
	Ounces.	*Ounces.*	*Ounces.*
January	7,676	7,645	5,076
February	4,748	4,129	4,143
March	7,517	4,497	4,392
April	4,450	6,885	4,518
May	5,950	6,377	4,038
June	4,787	4,705	3,555
July	4,984	6,524	4,502
August	5,946	3,460	11,532
September	6,191	4,650	6,714
October	6,137	4,940	6,029
November	6,783	5,619	6,413
December	5,228	5,413	11,128
Total	70,397	64,844	72,040

By calculation it is found that these ounces are 0.881 fine; therefore the fine product and value would be as follows:

Year.	Fine ounces.	Value.
1905	64,398	$1,331,225
1906	57,128	1,180,940
1907	63,522	1,313,075

GOLD.

[From the Mining Journal, London, October 10, 1908.]

The output of gold for 1907 would have been less than in 1906 had it not been for important discoveries which have been recently made in the northern Province of Diego-Saurez. The fortunate finders of these rich deposits (two Frenchmen named Mortages and Grignon) have exported during 1907 20,983 ounces of gold, being 29 per cent of the year's production for the entire island.

GOLD DISCOVERY.

[From the Board of Trade Journal, London, October 22, 1908.]

The "Dépêche Coloniale" (Paris) of October 17 states that information has been received from Madagascar to the effect that auriferous soil of a very promising kind has just been discovered near Tamatave, a district hitherto neglected by prospectors. In a few weeks there were extracted several kilograms of gold, including one nugget weighing nearly 500 grams. In the Antsirabo district, long known for its gold deposits, a mining engineer has for about a month been making careful investigations, which lead to the belief that here also industrial methods will have to displace the primitive methods which are still in vogue.

Rhodesia.

The Thirteenth Annual Report of the Rhodesia Chamber of Mines states that the gold production of southern Rhodesia in 1907 was valued at £2,178,886, equivalent in United States money to $10,603,549, which represents 512,947 ounces, fine.

The gold was reported as 612,052 crude ounces, and was, therefore, 0.838+ fine.

According to the same report the silver product for the fiscal year is given at 165,479 ounces, valued at £18,560, or, in United States money, $90,322, which shows that an ounce was valued at $0.546.

The Report of the Chamber of Mines for the month of August, 1908, states that the silver product for the calendar year 1907 was 147,324 ounces. Assuming that these ounces were of the same value as that for the fiscal year, viz, $0.546, the commercial value of this money, $90,322, which shows that an ounce was valued at $0.546.

From the same report we find that there was imported into southern Rhodesia from northeastern Rhodesia raw gold of the value of £817, or, in United States money, $3,976, representing 192 ounces, fine.

Natal.

The secretary of the American embassy, London, states that the output and value of gold from Natal during the year 1907 was 878 ounces, fine, valued at £3,730, equivalent in United States money to $18,152.

The London Board of Trade Journal for March 12, 1908, states that the Natal Government Gazette of February 4, 1908, gives the gold output for 1906 at 73 ounces, of the value of £308; this represents $1,500 in United States money.

MOZAMBIQUE.

The Annual Statement of the Trade of the United Kingdom for 1907 and the Thirteenth Annual Report of the Rhodesia Chamber of Mines for 1908 reports the value of the imports of gold from Portuguese East Africa into the United Kingdom and Rhodesia for the years 1905, 1906, and 1907 as follows:

Year.	United Kingdom.	Rhodesia.	Total.
1905	£18,932	£3,840	£22,772
1906	59,395	7,216	66,611
1907	84,046	11,076	95,122

The equivalent of these totals in United States money are $110,820, $324,162, and $462,911, respectively, and represent 5,361, 15,681, and 22,393 ounces, fine.

EGYPT.

This bureau has received no official information regarding Egypt's gold production since 1905, when the product was given as 9,923 fine ounces, valued at $205,128, which figures have been repeated for 1906 and 1907 in our table of the world's production.

BECHUANALAND.

The secretary of the American embassy, London, reports that the weight and value of the gold and silver production for Bechuanaland Protectorate for 1907 was as follows:

RETURN OF WEIGHT AND VALUE OF GOLD AND SILVER PRODUCED IN THE BECHUANALAND PROTECTORATE DURING THE YEAR 1907.

Metal.	Weight.	Total value.		
	Ounces.	£	s.	d.
Gold	4,788	20,406	8	2
Silver	443			

Assuming the ounces to be fine, the value of the gold would be $98,977 and the commercial value of the silver $292.

CAPE COLONY.

The American vice consul-general at Cape Town reports that the gold product of Cape Colony for 1907 was 19.255786 kilograms, valued at £2,387, equivalent to $11,616 in United States money, representing 562 ounces, fine.

PART IV.

GENERAL STATISTICS.

No. 1.—Domestic Production, Deposits, and Purchases of Gold,

	Locality and description of deposits.	Philadelphia.	San Francisco.	New Orleans.	Denver.	New York.
		Stand. oz.	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*
1	Alabama			93.168		
2	Alaska	325.408	58,763.558	18.439	333.373	661.415
3	Arizona	1,310.340	17,086.035	181.533	14,148.288	40.182
4	California	422.058	198,380.618	2.348	418.089	11,807.746
5	Colorado	31.145	229.913		336,254.509	201.706
6	Georgia	314.022		14.778		
7	Idaho	670.483	239.117		546.743	.700
8	Michigan					.605
9	Montana	102.033			992.536	5,138.406
10	Nevada	26.182	28,987.339		1,146.442	1,006.838
11	New Mexico		41,046		2,230.529	3,300.734
12	North Carolina	228.777				
13	Oregon	34.934	11,600.670		4.864	1,852.135
14	South Carolina					
15	South Dakota	10.096	54.543		123.683	178,592.943
16	Texas			42.966		
17	Utah	4.477	18.378		5,580.129	25,217.017
18	Virginia	435.422				
19	Washington		24,818			
20	Wyoming	70.574			88.482	
21	Porto Rico					66.483
22	Philippines	7.146	210.581			
23	Other	78.237				
24	Total domestic	4,071.334	315,636.616	353.232	361,867.667	227,886.910
25	Domestic bullion, refinery bars	17,315.457			284,521.121	379,316.947
26	Domestic bullion, refined	67.026	1,334,043.977		225,649.861	1,881,542.412
27	Total domestic bullion	21,453.817	1,649,680.593	353.232	872,038.649	2,488,746.269
28	Domestic coin, mutilated	4,932.984	749.669	2,117.508	8,494.095	36,625.017
29	Domestic coin transferred	93,450.810	5,316.864			
30	Foreign bullion, crude	14,518.975	29,199.234	36,423.017	44,543	235,419.500
31	Foreign bullion, refined					3,317,372.225
32	Foreign coin	192.123	27,346.295	1,345.936	2,749.710	631,055.996
33	Jewelers' bars, old plate, etc	62,510.799	5,878.707	2,748.572	3,135.939	288,149.741
34	Surplus bullion		188.620	94.598	382.370	136.953
35	Deposit, melting room, grains	32.520	37.786	9.691	477.198	282.696
36	Total deposits	197,092.028	1,718,397.768	43,092.554	887,322.504	6,997,788.397
	Redeposits:					
37	Fine bars	2,365,653.483				
38	Unparted bars	839,531.705	1,016,439.632			148.251
39	Mint bars	1,418,131.525				
40	Total redeposits	4,623,316.713	1,016,439.632			148.251
41	Total bullion	4,820,408.741	2,734,837.400	43,092.554	887,322.504	6,997,936 648

BY WEIGHT DURING THE CALENDAR YEAR ENDED DECEMBER 31, 1907.

Carson.	Boise.	Helena.	Charlotte.	St. Louis.	Deadwood.	Seattle.	Total.	
Stand. oz.	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	
			39.272				132.440	1
		21.485		46.890		722,323.015	782,493.583	2
				77.864			32,844.242	3
8,656.460						404.934	220,092.253	4
						.653	336,717.926	5
			739.479				1,068.279	6
	28,334.934	703.388				896.376	31,391.741	7
							.605	8
	425.682	80,177.449				13.691	86,849.797	9
51,930.488		4,078.122				8.739	87,184.150	10
							5,572.309	11
			3,301.784				3,530.561	12
	15,499.382					724.482	29,716.467	13
			302.260				302.260	14
					33,375.691		212,156.956	15
							42.966	16
							30,820.001	17
							435.422	18
	186.495	393.224				895.301	1,499.838	19
							159.056	20
							66.483	21
							217.727	22
			1.573				79.810	23
60,586.948	44,446.493	85,373.668	4,384.368	124.754	33,375,691	725,267.191	1,863,374.872	24
			5,571.533	1.010.397			687,735.455	25
				6,523.396		1.685	3,447,828.357	26
60,586.948	44,446.493	85,373.668	9,955.901	7,658.547	33,375.691	725,268.876	5,998,938.684	27
26.260				13,453.970		4.450	66,403.953	28
							98,767.674	29
		650.570		186.821		186,373.039	502,815.699	30
						11,293.482	3,328,665.707	31
			.402	22.171		58.356	662,770.989	32
		109.205	123.451	1,996.097		1,020.564	365,673.075	33
							802.541	34
1.562	17.316	9.852	13.320	.277	22.617	199.813	1,104.648	35
60,614.770	44,463.809	86.143.295	10.093.074	23.317.883	33.398.308	924.218.580	11,025.942.970	36
							2,365,653.483	37
		1,468.299					1,857,587.887	38
							1,418,131.525	39
		1,468.299					5,641,372.895	40
60,614.770	44,463.809	87,611.594	10,093.074	23,317.883	33.398.308	924.218.580	16,667,315.865	41

No. 2.—Domestic Production, Deposits, and Purchases of Silver,

	Locality and description of deposits.	Philadelphia.	San Francisco.	New Orleans.	Denver.	New York.
		Stand. oz.	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*
1	Alabama			49.74		
2	Alaska	53.74	6,565.08	2.55	22.51	105.53
3	Arizona	388.25	7,790.60	615.81	4,547.55	9.16
4	California	56.89	42,816.74	.26	61.18	1,358.74
5	Colorado	14.37	720.85		224,883.50	59.23
6	Georgia	34.99		5.24		
7	Idaho	142.02	53.83		90.57	308.66
8	Michigan	918.66				21,729.36
9	Montana	212.73			196.08	8,654.45
10	Nevada	95.46	6,834.79		203.75	590.67
11	New Mexico		9.16		544.72	132,421.64
12	North Carolina	35.93				
13	Oregon	11.10	3,129.16		.26	713.04
14	South Carolina					
15	South Dakota	9.40	1.80		39.77	55,768.88
16	Texas			8.55		
17	Utah	2.26	4.33		4,764.44	29.53
18	Virginia	165.25				
19	Washington		6.18			
20	Wyoming	6.57			11.08	
21	Porto Rico					5.64
22	Philippines	2.00	52.78			
23	Other	7.59				
24	Total domestic	2,157.21	67,985.30	682.15	235,365.41	221,754.53
25	Domestic bullion, refinery bars	1,005,452.45			6,549.48	345,567.94
26	Domestic bullion, refined	4,979,963.93	4,482,732.26	3,836,851.24	5,216,806.10	2,220,385.45
27	Total domestic bullion	5,987,573.59	4,550,717.56	3,837,533.39	5,458,720.99	2,787,707.92
28	Domestic coin, mutilated	2,954.55	88.00	171.09	29.95	
29	Domestic coin, transferred	864,373.34	65,147.16	60,543.00		
30	Trade dollars	125.28				
31	Foreign bullion, crude	646,634.48	1,020,234.84	18,513.44	67.14	1,000,274.28
32	Foreign bullion, refined					348,856.98
33	Foreign coin	326.34	22,857.30	55,404.37		136,368.84
34	Philippine coin for recoinage		8,400,999.99			
35	Philippine assay coins	99.81	91.00			
36	Contained in counterfeit coins		.55			
37	Jewelers' bars, old plate, etc	114,105.72	44,294.43	3,826.72	2,784.79	583,792.77
38	Surplus bullion	2,487.65	16,290.98	57.10	11,589.97	7,666.68
39	Deposit, melting room, grains	114.69	62.62	16.18	199.77	
40	Total deposits	7,618,795.45	14,120,784.43	3,976,065.29	5,473,392.61	4,864,667.47
	Redeposits:					
41	Fine bars	7,470.46	715,471.91			758,559.19
42	Unparted bars	1,858,693.21	177,384.33			29.36
43	Mint bars	113,966.82				
44	Total redeposits	1,980,130.49	892,856.24			758,588.55
45	Total bullion	9,598,925.94	15,013,640.67	3,976,065.29	5,473,392.61	5,623,256.02

BY WEIGHT DURING THE CALENDAR YEAR ENDED DECEMBER 31, 1907.

Carson.	Boise.	Helena.	Charlotte.	St. Louis.	Deadwood.	Seattle.	Total.	
Stand. oz.	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	
			13.90				63.64	1
		2.02		12.82		104,565.52	111,329.77	2
				64.96			13,416.33	3
10,155.24						70.56	54,519.61	4
						.20	225,678.15	5
			46.81				87.04	6
	18,497.68	147.64				238.95	19,479.35	7
							22,648.02	8
	74.00	43,799.23				6.44	52,942.93	9
15,939.26		1,179.25				3.05	24,846.23	10
							132,975.52	11
			832.83				868.76	12
	8,800.75					118.91	12,773.22	13
			31.07				31.07	14
					38,141.37		93,961.22	15
							8.55	16
							4,800.56	17
							165.25	18
	44.21	99.62				423.38	573.39	19
							17.65	20
							5.64	21
							54.78	22
			.07				7.66	23
26,094.50	27,416.64	45,227.76	924.68	77.78	38,141.37	105.427.01	771,254.34	24
			367.49	24.90			1,357,962.26	25
							20,736,738.98	26
26,094.50	27,416.64	45,227.76	1,292.17	102.68	38,141.37	105.427.01	22,865,955.58	27
							3,243.59	28
							990,063.50	29
							125.28	30
		210.64		326.25		42,700.51	2,728,961.58	31
							348,856.98	32
						.29	214,957.14	33
							8,400,999.99	34
							190.81	35
							.55	36
		41.18	36.65	535.12		443.41	749,860.79	37
							38,092.38	38
1.06	18.15	3.46	3.37	.46	37.51	30.48	487.75	39
26,095.56	27,434.79	45,483.04	1,332.19	964.51	38,178.88	148,601.70	36,341,795.92	40
							1,481,501.56	41
		372.48					2,036,479.38	42
							113,966.82	43
		372.48					3,631,947.76	44
26,095.56	27,434.79	45,855.52	1,332.19	964.51	38,178.88	148,601.70	39,973,743.68	45

No. 3.—Mutilated and Uncurrent Domestic Gold and Silver Coins Trans during the Cal

	Denomination.	Philadelphia.		San Francisco.		New Orleans.	
		Received from Treasury.	Purchased.	Received from Treasury.	Purchased.	Received from Treasury.	Purchased.
	GOLD.						
1	Double eagles	$479,760.00	$20,900.00	$54,280.00	$10,140.00	....	$13,180.00
2	Eagles	483,770.00	23,050.00	20,490.00	1,880.00	....	9,400.00
3	Half eagles	782,165.00	42,145.00	24,875.00	2,305.00	....	17,070.00
4	Three-dollar pieces	45.00	36.00	3.00	3.00	....	....
5	Quarter eagles	8,795.00	6,535.00	57.50	20.00	....	97.50
6	Dollars	41.00	131.00	3.00	13.00	....	2.00
7	Total face value	1,754,576.00	92,797.00	99,708.50	14,361.00	....	39,749.50
	SILVER.						
8	Trade dollars	....	144.00	....	....	....	....
9	Dollars	....	1,491.00	....	....	....	123.00
10	Half dollars	408,328.00	895.00	45,557.50	81.50	$24,090.00	38.00
11	Quarter dollars	341,874.00	640.25	24,941.25	27.00	28,530.00	28.25
12	Twenty-cent pieces	188.00	....	2.00	....	....	....
13	Dimes	401,039.00	647.50	16,093.00	8.40	29,115.00	21.90
14	Half dimes	715.05	9.05	49.55	....	10.00	1.95
15	Three-cent pieces	148.00	.66	....	....	....	....
16	Total face value	1,152,292.05	3,827.46	86,643.30	116.90	81,745.00	213.10
	SUMMARY.	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand oz.*
17	Gold coins	93,450.810	4,932.984	5,316.864	749.669	....	2,117.508
18	Silver coins	864,373.34	3,079.83	65,147.16	88.00	60,543.00	171.09
19	Gold. coining value	$1,738.619.71	$91,776.45	$98,918.40	$13,947.33	....	$39,395.50
20	Silver, coining value, subsidiary.	1,075,425.62	3,831.81	81,054.00	109.49	$75,325.66	212.87
21	Loss, gold value	15,956.29	1,020.55	790.10	413.67	....	354.00
22	Loss, silver, subsidiary	76,866.43	....	5,589.30	7.41	6,419.34	.23
23	Gain, silver, subsidiary	....	4.35	....	....	....	....

NOTE.—$157,880 in double eagles from deliveries 29, 33, 35 Denver mint melted = 8,486.050 standard ounces.

FERRED FROM THE TREASURY AND PURCHASED OVER THE COUNTER FOR RECOINAGE ENDAR YEAR 1907.

Denver.	New York.	Carson.	St. Louis.	Seattle.	Total.		Total.	
Purchased.	Purchased.	Purchased.	Purchased.	Purchased.	Received from Treasury.	Purchased.		
$157,920.00	$177,580.00	$480.00	$54,640.00	$60.00	$534,040.00	$434,900.00	$968,940.00	1
90.00	381,040.00	10.00	54,400.00	....	504,260.00	469,870.00	974,130.00	2
30.00	115,540.00	....	143,610.00	25.00	807,040.00	320,725.00	1,127,765.00	3
....	30.00	....	....	....	48.00	69.00	117.00	4
....	13,795.00	....	15.00	....	8,852.50	20,462.50	29,315.00	5
....	41.00	....	1.00	....	44.00	188.00	232.00	6
158,040.00	688,026.00	490.00	252,666.00	85.00	1,854,284.50	1,246,214.50	3,100,499.00	7
....	....	....	....	....	....	144.00	144.00	8
26.00	....	....	....	....	....	1,640.00	1,640.00	9
3.00	....	....	....	....	477,975.50	1,017.50	478,993.00	10
1.00	....	....	....	....	395,345.25	696.50	396,041.75	11
....	....	....	....	....	190.00	....	190.00	12
.40	....	....	....	....	446,247.00	678.20	446,925.20	13
....	....	....	....	....	774.60	11.00	785.60	14
....	....	....	....	....	148.00	.66	148.66	15
30.40	....	....	....	....	1,320,680.35	4,187.86	1,324,868.21	16
Stand. oz.	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	*Stand. oz.*	
8,494.095	36,625.017	26.260	13,453.970	4.450	98,767.674	66,403.953	168,171.627	17
29.95	....	....	....	....	990,063.50	3,368.87	993,432.37	18
$158,029.67	$681,395.65	$488.56	$250,306.13	$82.80	$1,837,538.11	$1,235,422.09	$3,072,960.20	19
37.26	....	....	....	....	1,231,805.28	4,191,43	1,235,996.71	20
10.33	6,630.35	1.44	2,359.87	2.20	16,746.39	10,792.41	27,538.80	21
....	....	....	....	....	88,875.07	7.64	88,882.71	22
6.86	....	....	....	....	....	11.21	11.21	23

No. 4.—Assets and Liabilities of the United States

ASSETS.

	Institutions.	Gold bullion.		Silver bullion.		Value of bullion shipped for coinage.
		Quantity.	Value.	Quantity.	Value (cost).	
	COINAGE MINTS.	*Standard oz.*	*Dollars.*	*Standard oz.*	*Dollars.*	*Dollars.*
1	Philadelphia	2,770,235.858	51,539,271.77	3,531,235.05	2,216,698.88	
2	Bullion for Philippine coinage.			348.82	220.05	
3	San Francisco	1,511,734.883	28,125,300.10	1,817,456.18	1,031,412.25	
4	Bullion for Philippine coinage.			2,487,220.38	1,955,416.93	
5	New Orleans	87,972.853	1,636,704.07	1,154,042.26	689,325.85	
6	Denver	727,401.411	13,533,049.50	1,252,259.86	668,471.97	
	ASSAY OFFICES.					
7	New York	3,635,378.254	67,634,944.30	748,748.37	403,545.22	615,974.00
8	Carson	4,256.807	79,196.05	4,723.87	2,360.29	464,324.76
9	Helena	2,519.499	46,874.40	1,414.80	707.40	72,699.33
10	Boise	1,560.400	29,030.70	574.34	287.17	30,149.12
11	St. Louis	1,059.582	19,713.16	207.38	103.69	
12	Charlotte	1,002,774	18,656.31	62.29	31.44	
13	Deadwood	3,168.058	58,940.89	3,206.88	1,610.41	
14	Seattle	11,580.738	215,454.51	2,134.41	1,097.01	12,007,845.09
15	Total	8,757,871.117	162,937,135.76	11,003,634.89	6,971,288.56	13,190,992.30

LIABILITIES.

	Institutions.	Bullion fund.	Undeposited earnings.	Seigniorage on silver.
	COINAGE MINTS.	*Dollars.*	*Dollars.*	*Dollars.*
16	Philadelphia	373,877,216.66	21,327.31	492,279.25
17	San Francisco	334,062,834.24	43,998.69	348,135.97
18	New Orleans	34,096,483.92	62.75	417,019.29
19	Denver	59,229,636.20		499,277.04
	ASSAY OFFICES.			
20	New York	86,277,853.24	14,506.50	
21	Carson	720,359.86	1,669.74	
22	Helena	317,154.22	692.55	
23	Boise	155,190.58	213.08	
24	St. Louis	46,721.07	318.28	
25	Charlotte	44,919.52	183.33	
26	Deadwood	115,770.24	183.64	
27	Seattle	12,926,324.63	31,379.97	
28	Total	901,870,464.38	114,535.84	1,756,711.55

Mints and Assay Offices, December 31, 1907.

ASSETS.

Cost of silver bullion for Philippine Island coinage.	Gold coin.	Silver coin.	Credit with assistant treasurer and depository banks.	Minor coin.	Minor coinage metal.	Deficiencies.	Total.	
Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	
	213,953,091.17	107,292,453.76	160,117.71	844,028.75	168,499.71	13,543.82	376,187,705.57	1
							220.05	2
295,054.78	245,656,845.31	62,011,199.85	10,140,094.14			413,557.96	347,673,464.39	3
							1,955,416.93	4
	1,501,080.00	30,080,844.99	605,684.84				34,513,639.75	5
	42,882,870.00	991,355.80	1,653,165.97				59,728,913.24	6
	6,212,562.35		12,237,886.98				87,104,912.85	7
	10,979.76	2,022.92	87,596.07			75,549.75	722,029.60	8
			197,565.64				317,846.77	9
			95,936.67				155,403.66	10
			27,222.50				47,039.35	11
			26,415.10				45,102.85	12
			55,402.58				115,953.88	13
			733,328.66				12,957,725.27	14
295,054.78	510,217,428.59	200,377,877.32	26,020,416.86	844,028.75	168,499.71	502,651.53	921,525,374.16	15

LIABILITIES.

Unpaid depositors.	Minor coinage profits.	Minor coin metal fund.	Unpaid cent depositors and subtreasury minor coin transfers.	Government of the Philippine Islands.	Total.	
Dollars.	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	
784,184.47	32,006.62	160,000.00	820,514.57	396.74	376,187,925.62	16
12,778,013.23				2,395,899.19	349,628,881.32	17
73.79					34,513,639.75	18
					59,728,913.24	19
812,553.11					87,104,912.85	20
					722,029.60	21
					317,846.77	22
					155,403.66	23
					47,039.35	24
					45,102.85	25
					115,953.88	26
20.67					12,957,725.27	27
14,374,845.27	32,006.62	160,000.00	820,514.57	2,396,295.93	921,525,374.16	28

No. 5.—HIGHEST, LOWEST, AND AVERAGE PRICE OF BAR SILVER IN LONDON, PER OUNCE BRITISH STANDARD (.925), SINCE 1833, AND THE EQUIVALENT IN UNITED STATES GOLD COIN OF AN OUNCE 1,000 FINE, TAKEN AT THE AVERAGE PRICE.

Calendar year.	Highest quotation.	Lowest quotation.	Average quotation.	Value of a fine ounce at average quotation.
	d.	*d.*	*d.*	*Dollars.*
1833	59 7/8	58 3/4	59 3/16	1.297
1834	60 3/4	59 3/4	59 15/16	1.313
1835	60	59 1/4	59 11/16	1.308
1836	60 3/4	59 3/8	60	1.315
1837	60 3/8	59	59 9/16	1.305
1838	60 1/8	59 1/2	59 1/2	1.304
1839	60 5/8	60	60 3/8	1.323
1840	60 3/4	60 1/8	60 3/8	1.323
1841	60 3/8	59 3/4	60 1/16	1.316
1842	60	59 1/4	59 7/16	1.303
1843	59 5/8	59	59 3/16	1.297
1844	59 3/4	59 1/4	59 1/2	1.304
1845	59 7/8	58 7/8	59 1/4	1.298
1846	60 1/8	59	59 5/16	1.300
1847	60 3/8	58 7/8	59 11/16	1.308
1848	60	58 1/2	59 1/2	1.304
1849	60	59 1/2	59 3/4	1.309
1850	61 1/2	59 1/2	61 1/16	1.316
1851	61 5/8	60	61	1.337
1852	61 7/8	59 7/8	60 1/2	1.326
1853	61 7/8	60 3/8	61 1/2	1.348
1854	61 7/8	60 7/8	61 1/2	1.348
1855	61 5/8	60	61 5/16	1.344
1856	62 1/4	60 1/2	61 5/16	1.344
1857	62 3/8	61	61 3/4	1.353
1858	61 7/8	60 3/4	61 5/16	1.344
1859	62 3/4	61 3/4	62 1/16	1.360
1860	62 3/8	61 1/4	61 11/16	1.352
1861	61 3/8	60 1/8	60 13/16	1.333
1862	62 1/8	61	61 7/16	1.346
1863	61 3/4	61	61 3/8	1.345
1864	62 1/2	60 5/8	61 3/8	1.345
1865	61 5/8	60 1/2	61 1/16	1.338
1866	62 1/4	60 3/8	61 1/8	1.339
1867	61 1/4	60 3/8	60 9/16	1.328
1868	61 1/8	60 1/8	60 1/2	1.326
1869	61	60	60 7/16	1.325
1870	60 3/4	60 1/4	60 9/16	1.328
1871	61	60 3/16	60 1/2	1.326
1872	61 1/8	59 1/4	60 5/16	1.322
1873	59 15/16	57 7/8	59 3/16	1.29769
1874	59 1/2	57 1/4	58 5/16	1.27883
1875	57 5/8	55 1/2	56 11/16	1.24233
1876	58 1/2	46 3/4	53 1/8	1.16414
1877	58 1/4	53 1/4	54 13/16	1.20189
1878	55 1/4	49 1/2	52 5/8	1.15358
1879	53 3/4	58 7/8	51 1/4	1.12392
1880	52 13/16	51 1/2	52 1/4	1.14507
1881	52 7/8	50 7/8	51 5/8	1.13229
1882	52 3/8	50	51 13/16	1.13562
1883	51 3/16	50 1/16	50 9/16	1.10874
1884	51 3/8	49 1/2	50 11/16	1.11068
1885	50	46 7/8	48 9/16	1.06510
1886	47	42	45 3/8	.99467
1887	47 1/8	43 1/4	44 11/16	.97946
1888	44 9/16	41 5/8	42 7/8	.93974
1889	44 3/8	41 15/16	42 11/16	.93511
1890	54 5/8	43 5/8	47 3/4	1.04634
1891	48 3/4	43 1/2	45 1/16	.98800
1892	43 3/4	37 7/8	39 3/4	.87145
1893	38 3/4	30 1/2	35 9/16	.78030
1894	31 3/4	27	28 15/16	.63479
1895	31 3/8	27 3/16	29 13/16	.65406
1896	31 15/16	29 3/4	30 13/16	.67565
1897	29 13/16	23 5/8	27 9/16	.60438
1898	28 3/8	25	26 15/16	.59010
1899	29	26 5/8	27 7/16	.60154
1900	30 1/4	27	28 5/16	.62007
1901	29 9/16	24 15/16	27 3/16	.59595
1902	26 1/16	21 11/16	24 1/16	.52795
1903	28 1/2	21 11/16	24 3/4	.54257
1904	28 9/16	24 7/16	26 13/32	.57876
1905	30 5/16	25 7/16	27 13/16	.61027
1906	33 1/8	29	30 7/8	.67689
1907	32 7/16	24 1/4	30 3/16	.66152

No. 6.—COMMERCIAL RATIO OF SILVER TO GOLD EACH YEAR SINCE 1687.

[NOTE.—From 1687 to 1832 the ratios are taken from Dr. A. Soetbeer, from 1833 to 1878 from Pixley and Abell's tables, and from 1879 to 1896 from daily cablegrams from London to the Bureau of the Mint, and since from daily London quotations.]

Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.	Year.	Ratio.
1687	14.94	1724	15.11	1761	14.54	1798	15.59	1835	15.80	1872	15.63
1688	14.94	1725	15.11	1762	15.27	1799	15.74	1836	15.72	1873	15.93
1689	15.02	1726	15.15	1763	14.99	1800	15.68	1837	15.83	1874	16.16
1690	15.02	1727	15.24	1764	14.70	1801	15.46	1838	15.85	1875	16.64
1691	14.98	1728	15.11	1765	14.83	1802	15.26	1839	15.62	1876	17.75
1692	14.92	1729	14.92	1766	14.80	1803	15.41	1840	15.62	1877	17.20
1693	14.83	1730	14.81	1767	14.85	1804	15.41	1841	15.70	1878	17.92
1694	14.87	1731	14.94	1768	14.80	1805	15.79	1842	15.87	1879	18.39
1695	15.02	1732	15.09	1769	14.72	1806	15.52	1843	15.93	1880	18.05
1696	15.00	1733	15.18	1770	14.62	1807	15.43	1844	15.85	1881	18.25
1697	15.20	1734	15.39	1771	14.66	1808	16.08	1845	15.92	1882	18.20
1698	15.07	1735	15.41	1772	14.52	1809	15.96	1846	15.90	1883	18.64
1699	14.94	1736	15.18	1773	14.62	1810	15.77	1847	15.80	1884	18.61
1700	14.81	1737	15.02	1774	14.62	1811	15.53	1848	15.85	1885	19.41
1701	15.07	1738	14.91	1775	14.72	1812	16.11	1849	15.78	1886	20.78
1702	15.52	1739	14.91	1776	14.55	1813	16.25	1850	15.70	1887	21.10
1703	15.17	1740	14.94	1777	14.54	1814	15.04	1851	15.46	1888	22.00
1704	15.22	1741	14.92	1778	14.68	1815	15.26	1852	15.59	1889	22.10
1705	15.11	1742	14.85	1779	14.80	1816	15.28	1853	15.33	1890	19.75
1706	15.27	1743	14.85	1780	14.72	1817	15.11	1854	15.33	1891	20.92
1707	15.44	1744	14.87	1781	14.78	1818	15.35	1855	15.38	1892	23.72
1708	15.41	1745	14.98	1782	14.42	1819	15.33	1856	15.38	1893	26.49
1709	15.31	1746	15.13	1783	14.48	1820	15.62	1857	15.27	1894	32.56
1710	15.22	1747	15.26	1784	14.70	1821	15.95	1858	15.38	1895	31.60
1711	15.29	1748	15.11	1785	14.92	1822	15.80	1859	15.19	1896	30.59
1712	15.31	1749	14.80	1786	14.96	1823	15.84	1860	15.29	1897	34.20
1713	15.24	1750	14.55	1787	14.92	1824	15.82	1861	15.50	1898	35.03
1714	15.13	1751	14.39	1788	14.65	1825	15.70	1862	15.35	1899	34.36
1715	15.11	1752	14.54	1789	14.75	1826	15.76	1863	15.37	1900	33.33
1716	15.09	1753	14.54	1790	15.04	1827	15.74	1864	15.37	1901	34.68
1717	15.13	1754	14.48	1791	15.05	1828	15.78	1865	15.44	1902	39.15
1718	15.11	1755	14.68	1792	15.17	1829	15.78	1866	15.43	1903	38.10
1719	15.09	1756	14.94	1793	15.00	1830	15.82	1867	15.57	1904	35.70
1720	15.04	1757	14.87	1794	15.37	1831	15.72	1868	15.59	1905	33.87
1721	15.05	1758	14.85	1795	15.55	1832	15.73	1869	15.60	1906	30.54
1722	15.17	1759	14.15	1796	15.65	1833	15.93	1870	15.57	1907	31.24
1723	15.20	1760	14.14	1797	15.41	1834	15.73	1871	15.57		

No. 7.—Imports of Gold and Silver, by Customs Districts, into the

	Customs districts.	GOLD.					
		In ore and base bullion.	Bullion refined.		Coin.		Total gold.
					United States.	Foreign.	
		Dollars.	*Ounces.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1	Baltimore, Md		19,170	383,457			383,457
2	Bangor, Me		2,344	39,473		1,425	40,898
3	Boston and Charlestown, Mass.		459	8,255	1,951,314		1,959,569
4	Bridgeport, Conn						
5	Charleston, S. C					77	77
6	Newark, N. J						
7	New York, N. Y	764,591	3,243,640	66,819,009	25,512,139	10,132,489	103,258,228
8	Passamaquoddy, Me		9,008	179,510	2,691		182,201
9	Perth Amboy, N. J	3,976,344					3,976,344
10	Philadelphia, Pa	625				8,771	9,396
11	Porto Rico						
12	Galveston, Tex				9,590		9,590
13	Key West, Fla				5,000		5,000
14	Mobile, Ala	13,343					13,343
15	New Orleans, La	608,922				2,701	611,623
16	Tampa, Fla				74,808		74,808
17	Arizona	911,544	50,183	1,001,842			1,916,386
18	Brazos del Santiago, Tex						
19	Corpus Christi, Tex		10,247	211,395	365		211,760
20	Paso del Norte, Tex	939,181	23,702	474,074			1,413,255
21	Saluria, Tex	134,916	9,836	203,002			337,918
22	Alaska	424,780	184,304	2,947,359	1,275		3,373,414
23	Puget Sound, Wash	3,526,419	67,775	1,335,353	433,081		5,294,853
24	San Diego, Cal	276	347	5,711			5,987
25	San Francisco, Cal	576,727	83,048	1,727,925	23,431	1,178,175	3,506,258
26	Buffalo Creek, N. Y	3,167			2,221,301	194,660	2,419,128
27	Champlain, N. Y	19,155			12,934,746	8,099	12,962,000
28	Chicago, Ill	10			100,402		100,412
29	Detroit, Mich	245	530	9,350	92,570		102,165
30	Genesee, N. Y				150,000		150,000
31	Huron, Mich	1,300					1,300
32	Memphremagog, Vt						
33	Minnesota, Minn	25					25
34	Montana and Idaho	790					790
35	Niagara, N. Y	447	80	1,500	14,430	542	16,919
36	North and South Dakota				107		107
37	Oswegatchie, N. Y	888,011					888,011
38	Vermont, Vt	70	32	669	117,890	6,130	124,759
39	Denver, Colo	542				46,320	46,862
40	Omaha, Nebr						
41	St. Louis, Mo	1,229					1,229
42	Total	12,792,659	3,704,705	75,350,884	43,675,140	11,579,389	143,398,072

UNITED STATES DURING THE CALENDAR YEAR ENDING DECEMBER 31, 1907.

SILVER.						Total gold and silver.	
Contained in ore.	Bullion.		Coin.		Total silver.		
			United States.	Foreign.			
Dollars.	*Ounces.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	
155,412	986,990	642,248	....	....	797,660	1,181,117	
....	....	....	5,999	5,934	11,933	52,831	1
....	....	....			....	1,959,569	2
....	5,927	3,118	....	....	3,118	3,118	3 4
....	....	....	....	....	....	77	5
2,140	....	....	....	....	2,140	2,140	6
2,340,684	4,335,358	2,831,565	85,281	397,883	5,655,413	108,913,641	7
....	....	....	33,706	....	33,706	215,907	8
12,425,763	....	....	....	....	12,425,763	16,402,107	9
....	....	....	....	535	535	9,931	10
....	....	....	8,200	....	8,200	8,200	11
....	....	....	....	....	....	9,590	12
....	....	....	....	....	....	5,000	13
....	....	....	....	34,865	34,865	48,208	14
....	....	....	....	317,823	317,823	929,446	15
....	....	....	6,274	....	6,274	81,082	16
1,975,315	1,164,786	722,170	....	202,686	2,900,171	4,816,557	17
....	....	....	....	166	166	166	18
....	626,940	412,466	885	379,468	792,819	1,004,579	19
1,713,611	2,032,881	1,314,586	....	2,338,099	5,366,296	6,779,551	20
563,620	5,614,711	3,622,945	....	698,270	4,884,835	5,222,753	21
16,031	27	16	....	....	16,047	3,389,461	22
1,281,634	....	....	132,546	....	1,414,180	6,709,033	23
....	....	....	....	....	....	5,987	24
438,871	4,156,339	2,688,256	....	210,683	3,337,810	6,844,068	25
244,086	....	....	222,420	....	466,506	2,885,634	26
1,959,583	....	....	63,335	....	2,022,918	14,984,918	27
....	1,097	639	....	....	639	101,051	28
1,527	1,320	716	216,960	....	219,203	321,368	29
....	....	....	....	....	....	150,000	30
16,188	850	600	....	....	16,788	18,088	31
10	....	....	....	....	10	10	32
....	....	....	....	....	....	25	33
8,383	....	....	....	....	8,383	9,173	34
3,783,111	9,824	4,102	3,527	....	3,790,740	3,807,659	35
42,012	....	....	903	....	42,915	43,022	36
1,057,910	....	....	....	....	1,057,910	1,945,921	37
1,205	53,709	31,634	8,722	2,448	44,009	168,768	38
225,501	....	....	....	....	225,501	272,363	39
2,233	....	....	....	....	2,233	2,233	40
4,851	....	....	....	....	4,851	6,080	41
28,259,681	18,990,759	12,275,061	788,758	4,588,860	45,912,360	189,310,432	42

No. 8.—Imports of Gold and Silver, by Countries, into the United

	Countries.	GOLD.					
		In ore and base bullion.	Bullion, refined.		Coin.		Total gold.
					United States.	Foreign.	
		Dollars.	*Ounces.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
1	Azores and Madeira Islands	....	....	....	2,240	....	2,240
2	Belgium	....	6	155	....	....	155
3	Denmark	....	....	....	....	....	....
4	France	....	112,294	2,313,290	1,664,541	1,059,966	5,037,797
5	Germany	....	989	20,312	1,250,000	1,033,634	2,303,946
6	Gibraltar	....	....	....	568	....	568
7	Greece	....	....	....	....	....	....
8	Netherlands	....	3,847	79,254	3,510	....	82,764
9	Spain	....	61	1,230	....	10	1,240
10	United Kingdom	....	2,971,655	61,207,552	20,074,692	6,876,707	88,158,951
11	Bermuda	....	....	....	20	14,575	14,595
12	British Honduras	12,694	....	....	....	1,760	14,454
	Dominion of Canada:						
13	Nova Scotia, New Brunswick, etc.	600	11,811	227,238	2,691	1,425	231,954
14	Quebec, Ontario, etc	612,819	184,946	2,958,880	15,383,519	209,431	19,164,649
15	British Columbia	4,101,562	67,775	1,335,353	448,106	....	5,888,021
	Central American States:						
16	Costa Rica	577	14,866	308,740	200	....	309,517
17	Guatemala	4,935	....	....	....	941	5,876
18	Honduras	155,066	4,398	90,603	....	....	245,669
19	Nicaragua	609,001	2,813	57,987	1,700	387	669,078
20	Panama	....	195	4,010	....	2,418	6,428
21	Salvador	....	45,174	933,559	....	4,200	937,759
22	Mexico	6,895,795	166,948	3,406,786	8,471	4,300	10,315,352
	West Indies:						
23	British	....	2,846	58,608	290,192	19,986	368,786
24	Cuba	24,932	1,232	25,381	2,365,308	1,053,597	3,469,218
25	Danish	....	....	....	26,023	5,333	31,356
26	Dutch	....	51	1,097	16,537	67,681	85,315
27	French	....	....	....	19,839	752	20,591
28	Haiti	....	68	1,400	139,731	1,967	143,098
29	Santo Domingo	....	32	670	2,435	4,483	7,588
30	Argentina	....	....	....	1,950,000	....	1,950,000
31	Chile	181,166	1,463	29,800	....	....	210,966
32	Colombia	6,189	92,584	1,907,318	22	15,417	1,928,946
33	Ecuador	118,097	7,233	149,036	....	....	267,133
34	Guiana—British	912	3,780	77,848	....	....	78,760
35	Peru	8,826	18	356	....	....	9,182
36	Venezuela	....	1,057	21,783	24,435	22,131	68,349
37	Chinese Empire	25	....	....	....	....	25
38	Japan	40	....	....	....	448,313	448,353
39	Korea	1,105	....	....	....	....	1,105
40	Australia and Tasmania	53,765	6,560	132,638	....	729,975	916,378
41	French Oceania	....	....	....	....	....	....
42	Philippine Islands	1,550	....	....	....	....	1,550
43	Canary Islands	....	....	....	360	....	360
44	Total	12,792,659	3,704,705	75,350,884	43,675,140	11,579,389	143,398,072

STATES DURING THE CALENDAR YEAR ENDING DECEMBER 31, 1907.

SILVER.						Total gold and silver.	
Contained in ore.	Bullion.		Coin.		Total silver.		
			United States.	Foreign.			
Dollars.	*Ounces.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*	
....	....	....	18	....	18	2,258	1
....	817	438	....	....	438	593	2
....	....	....	650	....	650	650	3
....	....	....	2,270	....	2,270	5,040,067	4
....	44,956	30,697	6,036	269	37,002	2,340,948	5
....	....	....	1,941	....	1,941	2,509	6
....	250	154	....	58	212	212	7
....	....	....	....	....	....	82,764	8
....	5,233	3,519	....	....	3,519	4,759	9
....	517,838	344,629	2,786	12,870	360,285	88,519,236	10
....	....	....	448	1,947	2,395	16,990	11
....	....	....	....	236,177	236,177	250,631	12
300	....	....	39,705	5,934	45,939	277,893	13
7,180,203	72,752	40,820	515,917	2,498	7,739,438	26,904,087	14
1,050,946	....	....	132,546	....	1,183,492	7,071,513	15
622	349,012	208,148	....	1,100	209,870	519,387	16
....	....	....	....	14,082	14,082	19,958	17
373,187	265,205	157,374	....	166,086	696,647	942,316	18
1,404	....	....	....	60.287	61,691	730,769	19
....	2,498	1,400	....	10,706	12,106	18,534	20
....	90,845	51,345	....	....	51,345	989,104	21
17,997,317	17,057,682	11,063,421	4,472	3,922,702	32,987,942	43,303,294	22
....	1,800	1,054	53.566	2,364	56,984	425,770	23
3,037	18,595	11,798	6,274	800	21,909	3,491,127	24
....	....	....	13,257	6,974	20,231	51,587	25
....	....	....	1,740	2,389	4,129	89,444	26
....	....	....	2,291	203	2,494	23,085	27
....	5.300	3,205	2,070	73,116	78,391	221.489	28
....	127	80	1,100	858	2,038	9,626	29
....	....	....	....	....	....	1,950,000	30
1,525,046	393,546	253,583	....	....	1,778,629	1,989,595	31
6,551	8,305	5,905	628	38,347	51,431	1,980,377	32
....	2,648	1,621	....	....	1,621	268,754	33
1.435	....	....	....	....	1,435	80,195	34
25,828	1,962	1,281	....	....	27,109	36,291	35
....	....	....	918	....	918	69,267	36
5	....	....	....	....	5	30	37
333	4,000	2,880	....	....	3,213	451,566	38
7,957	....	....	....	....	7,957	9,062	39
85,480	147,388	91,709	....	....	177.189	1,093,567	40
....	....	....	....	29,093	29,093	29,093	41
....	....	....	....	....	....	1,550	42
....	....	....	125	....	125	485	43
28,259.681	18,990,759	12,275,064	788.758	4,588,860	45,912,360	189,310,432	44

No. 9.—EXPORTS, BY DISTRICTS, OF DOMESTIC GOLD AND SILVER FROM THE UNITED STATES DURING THE CALENDAR YEAR ENDING DECEMBER 31, 1907.

Customs districts.	GOLD.				
	In ore and base bullion.	Bullion, refined.		Coin.	Total gold.
	Dollars.	*Ounces.*	*Dollars.*	*Dollars.*	*Dollars.*
Baltimore, Md				6,700	6,700
New York, N. Y	1,050	[a] 1,544,624	31,788,331	4,295,267	36,084,648
Mobile, Ala				5,000	5,000
New Orleans, La				433,500	433,500
Corpus Christi, Tex				182,750	182,750
Paso del Norte, Tex	96,232	1,350	27,000	3,213,885	3,337,117
Saluria, Tex				250	250
Alaska	182,672	704	11,000	200	193,872
Hawaii				500	500
Puget Sound, Wash	65,416	1,600	30,107	61,295	156,818
San Francisco, Cal		193	3,996	17,596	21,592
Buffalo Creek, N. Y		3,516	72,875		72,875
Champlain, N. Y				10,596,000	10,596,000
Detroit, Mich				250	250
Huron, Mich	617				617
Memphremagog, Vt	6				6
Niagara, N. Y		745	15,303	1,964,604	1,979,907
Vermont		1,043	20,157	232,866	253,023
Total	345,993	1,553,775	31,968,769	21,010,663	53,325,425

Customs districts.	SILVER.					Total values of gold and silver.
	In ore and base bullion.	Bullion, refined.		Coin	Total silver.	
	Dollars.	*Ounces.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
Baltimore, Md						6,700
Bangor, Me		49	36		36	36
Newark, N. J		1,527,936	1,018,595		1,018,595	1,018,595
New York, N. Y	164,400	[b] 64,313,643	42,355,293	209,055	42,728,748	78,813,396
Perth Amboy, N. J		4,054,810	2,671,579		2,671,579	2,671,579
Mobile, Ala						5,000
New Orleans, La				40	40	433,540
Corpus Christi, Tex						182,750
Paso del Norte, Tex	238,208	197,507	194,725		432,933	3,770,050
Saluria, Tex						250
Alaska	9,229				9,229	203,101
Hawaii						500
Puget Sound, Wash	5,792	111,242	87,331	11,376	104,499	261,317
San Francisco, Cal		4,659,589	2,953,869	1,635	2,955,504	2,977,096
Buffalo Creek, N. Y		135,997	87,918	5,020	92,938	165,813
Champlain, N. Y		11,198	7,218		7,218	10,603,218
Detroit, Mich				860	860	1,110
Huron, Mich						617
Memphremagog, Vt		253	161		161	167
Niagara, N. Y		53,501	35,435	1,600	37,035	2,016,942
Oswegatchie, N. Y		84	61		61	61
Vermont		134,834	90,936		90,936	343,959
Total	417,629	75,200,643	49,503,157	229,586	50,150,372	103,475,797

[a] Includes 1,471,535 ounces, value $30,281,216 mint or assay office bars.
[b] Includes 468,027 ounces, value $296,611 mint or assay office bars.

No. 10.—Exports, by Countries, of Domestic Gold and Silver from the United States during the Calendar Year ending December 31, 1907.

Countries.	GOLD.				
	In ore and base bullion.	Bullion, refined.		Coin.	Total gold.
	Dollars.	Ounces.	Dollars.	Dollars.	Dollars.
France		1,205,826	24,804,454		24,804,454
Germany	975	126,930	2,617,748		2,618,723
Italy					
Netherlands				1,500,000	1,500,000
United Kingdom	75	211,868	4,366,129	122	4,366,326
British Honduras				37,500	37,500
Dominion of Canada:					
Nova Scotia, New Brunswick, etc					
Quebec, Ontario, etc	104,730	5,304	108,335	12,793,920	13,006,985
British Columbia	143,981	2,304	41,107	61,295	246,383
Central American States:					
Costa Rica				390,000	390,000
Honduras				10,000	10,000
Panama				1,501,000	1,501,000
Mexico	96,232	1,350	27,000	3,413,885	3,537,117
West Indies:					
British				48,600	48,600
Cuba				5,000	5,000
Haiti				189,315	189,315
Santo Domingo				101,180	101,180
Argentina				750,000	750,000
Brazil				2,750	2,750
Colombia				20,000	20,000
Ecuador				150,000	150,000
Guiana—British					
Venezuela				20,000	20,000
Chinese Empire					
Hongkong		193	3,996	14,596	18,592
Japan				1,500	1,500
British Oceania					
Total	345,993	[a] 1,553,775	31,968,769	21,010,663	53,325,425

Countries	SILVER.					Total value of gold and silver.
	In ore and base bullion.	Bullion, refined.		Coin.	Total silver.	
	Dollars.	Ounces.	Dollars.	Dollars.	Dollars.	Dollars.
France		8,105,284	5,246,260		5,246,260	30,050,714
Germany	128,164	139,796	95,840	1,000	225,004	2,843,727
Italy				3,000	3,000	3,000
Netherlands						1,500,000
United Kingdom	36,236	61,648,099	40,701,255	1,000	40,738,491	45,104,817
British Honduras		45	33		33	37,533
Dominion of Canada:						
Nova Scotia, New Brunswick, etc		4	3		3	3
Quebec, Ontario, etc		335,867	221,729	7,480	229,209	13,236,194
British Columbia	15,021	50,930	37,875	11,376	64,272	310,655
Central American States:						
Costa Rica						390,000
Honduras						10,000
Panama				500	500	1,501,500
Mexico	238.208	197,507	194.725		432,933	3,970,050
West Indies:						
British				5,200	5.200	53,800
Cuba				92,415	92,415	97,415
Haiti						189,315
Santo Domingo				105,980	105,980	207,160
Argentina						750,000
Brazil						2,750
Colombia						20,000
Ecuador						150,000
Guiana—British		3,210	2.112		2,112	2,112
Venezuela						20,000
Chinese Empire		1.621.950	962.676		962,676	962,676
Hongkong		3,097,951	2,040,649		2,040,649	2,059,241
Japan						1,500
British Oceania				1,635	1,635	1,635
Total	417,629	[b] 75,200,643	49,503,157	229,586	50,150,372	103,475.797

[a] Includes 1,471,535 ounces, value $30,281,216, mint or assay office bars.

[b] Includes 468,027 ounces, value $296,611, mint or assay office bars.

No. 11.—Foreign Exports, by Customs Districts and Countries, for the Calendar Year ending December 31, 1907.

Customs districts and countries.	GOLD.				
	In ore and base bullion.	Bullion, refined.		Coin.	Total gold.
CUSTOMS DISTRICTS.	*Dollars.*	*Ounces.*	*Dollars.*	*Dollars.*	*Dollars.*
New York, N. Y				1,430,592	1,430,592
Mobile, Ala					
New Orleans, La					
Arizona				100,000	100,000
Paso del Norte					
Saluria, Tex					
Hawaii				7,450	7,450
Puget Sound, Wash				1,952	1,952
San Francisco, Cal					
Buffalo Creek, N. Y		137	2,816	12,631	15,447
Champlain, N. Y				257,964	257,964
Detroit, Mich					
Huron, Mich		18	258		258
Montana and Idaho					
Vermont				76,593	76,593
Total		155	3,074	1,887,182	1,890,256
COUNTRIES.					
France				479,440	479,440
Germany					
United Kingdom					
British Honduras					
Dominion of Canada:					
Quebec, etc		155	3,074	347,188	350,262
British Columbia				1,952	1,952
Central American States:					
Honduras					
Nicaragua					
Panama				970	970
Mexico				100,000	100,000
West Indies:					
British					
Cuba				581,275	581,275
Dutch				285	285
Chile					
Colombia				93,622	93,622
Guiana—British					
Peru				275,000	275,000
Hongkong					
Japan					
British Australasia—Tasmania				7,450	7,450
British Oceania, all others					
French Oceania					
Total		155	3,074	1,887,182	1,890,256

No. 11.—Foreign Exports, by Customs Districts and Countries, for the Calendar Year ending December 31, 1907—Continued.

Customs districts and countries.	SILVER.					Total values of gold and silver.
	In ore and base bullion.	Bullion, refined.		Coin.	Total silver.	
CUSTOMS DISTRICTS.	*Dollars.*	*Ounces.*	*Dollars.*	*Dollars.*	*Dollars.*	*Dollars.*
New York, N. Y		3,215,746	1,991,514	5,175,123	7,166,637	8,597,229
Mobile, Ala				16,250	16,250	16,250
New Orleans, La				87,791	87,791	87,791
Arizona				108,200	108,200	208,200
Paso del Norte				2,934,080	2,934,080	2,934,080
Saluria, Tex				279,838	279,838	279,838
Hawaii				2,137	2,137	9,587
Puget Sound, Wash				3,127	3,127	5,079
San Francisco, Cal				721,151	721,151	721,151
Buffalo Creek, N. Y				19,152	19,152	34,599
Champlain, N. Y				61,691	61,691	319,655
Detroit, Mich				1,429	1,429	1,429
Huron, Mich						258
Montana and Idaho	6,213				6,213	6,213
Vermont				67,798	67,798	144,391
Total	6,213	3,215,746	1,991,514	9,477,767	11,475,494	13,365,750
COUNTRIES.						
France						479,440
Germany				20,389	20,389	20,389
United Kingdom		3,215,746	1,991,514	5,112,626	7,104,140	7,104,140
British Honduras				9,920	9,920	9,920
Dominion of Canada:						
Quebec, etc				150,070	150,070	500,332
British Columbia	6,213			3,399	9,612	11,564
Central American States:						
Honduras				41,500	41,500	41,500
Nicaragua				52,621	52,621	52,621
Panama				6,900	6,900	7,870
Mexico				3,797,118	3,797,118	3,897,118
West Indies:						
British				24,965	24,965	24,965
Cuba						581,275
Dutch						285
Chile				17	17	17
Colombia						93,622
Guiana—British				10,243	10,243	10,243
Peru						275,000
Hongkong				241,216	241,216	241,216
Japan				1,955	1,955	1,955
British Australasia—Tasmania						7 450
British Oceania, all others				1,628	1,628	1,628
French Oceania				3,200	3,200	3,200
Total	6,213	3,215,746	1,991,514	9,477,767	11,475,494	13,365,750

No. 12.—RECAPITULATION OF IMPORTS AND EXPORTS. BULLION AND COIN, DURING THE CALENDAR YEAR 1907.

Description.	Imports.	Exports.	Excess. Imports.	Excess. Exports.
GOLD.				
Contained in domestic ore		$345,993		$345,993
Contained in foreign ore	$12,792,659		$12,792,659	
Domestic bullion		31,968,769		31,968,769
Foreign bullion	75,350,884	3,074	75,347,810	
United States coin	43,675,140	21,010,663	22,664,477	
Foreign coin	11,579,389	1,887,182	9,692,207	
Total	143,398,072	55,215,681	120,497,153	32,314,762
Excess of imports			88,182,391	
SILVER.				
Contained in domestic ore		417,629		417,629
Contained in foreign ore	28,259,681	6,213	28,253,468	
Domestic bullion		49,503,157		49,503,157
Foreign bullion	12,275,061	1,991,514	10,283,547	
United States coin	788,758	229,586	559,172	
Foreign coin	4,588,860	9,477,767		4,888,907
Total	45,912,360	61,625,866	39,096,187	54,809,693
Excess of exports				15,713,506

	GOLD.						
	Contained in domestic ore.	Contained in foreign ore.	Domestic bullion.	Foreign bullion.	United States coin.	Foreign coin.	Total.
Imports		$12,792,659		$75,350,884	$43,675,140	$11,579,389	$143,398,072
Exports	$345,993		$31,968,769	3,074	21,010,663	1,887.182	55,215,681
Excess:							
Imports		12,792,659		75,347,810	22,664,477	9,692,207	120,497,153
Exports	345,993		31,968,769				32,314,762
Total excess imports							88,182,391

	SILVER.						
	Contained in domestic ore.	Contained in foreign ore.	Domestic bullion.	Foreign bullion.	United States coin.	Foreign coin.	Total.
Imports		$28,259,681		$12,275,061	$788,758	$4,588,860	$45,912,360
Exports	$417,629	6,213	$49,503,157	1,991,514	229,586	9,477,767	61,625,866
Excess:							
Imports		28,253,468		10,283,547	559,172		39,096,187
Exports	417,629		49,503,157			4,888,907	54,809,693
Total excess exports							15,713,506

No. 13.—Transit and Transshipment of Gold and Silver in the Customs District of New York[a] during the Calendar Year ending December 31, 1907.

Countries from which received and to which shipped.	Gold.				Silver.				Total gold and silver.
	In ore.	Bullion refined.	Coin, foreign.	Total gold.	In ore.	Bullion.	Coin, foreign.	Total silver.	
Received from—									
United Kingdom	....	....	$1,025,028	$1,025,028	....	....	$19,733	$19,733	$1,044,761
Central American States—Nicaragua	....	$815	....	815	....	....	....	....	815
Mexico	$36,472	16,500	....	52,972	$324,788	$2,091,131	3,094,700	5,510,619	5,563,591
West Indies:									
British	....	47,965	....	47,965	860	23,126	50,000	73,986	121,951
Cuba	....	162,781	2,891,000	3,053,781	152,939	1,795,547	2,302,549	4,251,035	7,304,816
Colombia	2,730	259,447	....	262,177	1,020	57,103	....	58,123	320,300
Ecuador	....	1,025	....	1,025	....	....	....	....	1,025
Total	39,202	488,533	3,916,028	4,443,763	479,607	3,966,907	5,466,982	9,913,496	14,357,259
Shipped to—									
France	2,730	22,911	2,891,000	2,916,641	840	521,327	251,150	773,317	3,689,958
Germany	....	....	....	....	....	1,121,179	38,919	1,160,098	1,160,098
United Kingdom	36,472	465,622	....	502,094	478,767	2,324,401	5,157,180	7,960,348	8,462,442
Dominion of Canada: Manitoba, etc.	....	....	1,025,028	1,025,028	....	....	....	....	1,025,028
West Indies—British	....	....	....	....	....	....	19,733	19,733	19,733
Total	39,202	488,533	3,916,028	4,443,763	479,607	3,966,907	5,466,982	9,913,496	14,357,259

[a] No transactions occurred in other customs districts.

No. 14.—COINAGE OF NATIONS.

Country.	1905.		1906.		1907.	
	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.
United States	$49,638,441	$6,332,181	$78,793,045	$10,651,088	$131,907,490	$13,178,436
Philippine Islands	...	3,283,428	...	100,951	...	6,730,260
Abyssinia	...	20,072	...	...	...	...
Austria-Hungary	10,187,354	379,592	7,403,715	932,581	4,605,184	3,458,435
Belgium	...	...	...	...	...	105,185
Bolivia	...	235,842	...	295,462	...	...
Brazil	...	...	4,324	604,968	40,962	4,340,900
British Empire:						
Australasia	54,933,203	...	55,841,584	...	52,772,229	...
Canada	...	450,000	...	809,463	...	1,194,000
British Honduras	...	...	...	...	...	24,500
Ceylon	...	...	...	...	...	25,955
Cyprus	...	...	...	...	...	24,333
Newfoundland	...	...	...	...	...	50,000
Great Britain	35,525,450	1,540,744	61,147,573	8,865,780	100,011,442	9,924,740
Hongkong	...	3,698,727	...	248,813	...	...
India	...	36,889,486	...	64,891,356	...	84,630,837
Straits Settlements	...	248,815	...	...	...	17,517,000
Sarawak	...	...	...	15,000	...	2,000
Chile	...	966,763	...	293,948	90,867	750,166
China	...	37,985,729	...	11,089,409	...	5,316,439
Costa Rica	...	52,000	...	...	...	...
Colombia	...	...	...	227,433	...	1,017,580
Danish West Indies	192,050	60,334	...	...	...	29,172
Denmark	...	250,878	...	80,815	...	216,789
Ecuador	...	24,333	...	...	...	...
Egypt	27,187	1,016,618	...	1,349,094	...	2,224,350
France	38,294,861	2,160,434	64,064,117	626,801	75,261,788	1,202,130
French colonies:						
Indo-China	...	3,560,882	...	10,194,060	...	14,061,745
Tunis	249	349	249	349	266	77,551
Germany	36,201,237	16,280,551	40,995,041	14,716,370	15,925,915	20,216,679
Colony of German East Africa	...	421,763	...	561,667	...	324,433
Honduras	...	...	...	...	...	3,000
Italy	53,172	769,326	...	1,274,612	...	2,115,806
San Marino	...	...	...	11,580	...	...
Japan	10,446,464	4,932,418	13,286,840	4,096,944	8,944,080	8,586,999
Korea	...	249,200	49,800	647,400	...	517,920
Liberia	...	...	...	24.000	...	...
Mexico	717,654	7,365,925	26,234,640	11,296,000	10,632,152	9,651,454
Morocco	...	1,015,728	...	868,500	...	...
Netherlands	200,924	603,000	68,144	562,800	...	1,849,200
Dutch East Indies	...	1,206.000	...	904,500	...	1,869,300
Norway	...	...	...	53,600	...	97,927
Panama	...	1,928,986	...	...	...	...
Persia	147,489	1,116,349	149,571	1,014,061	...	...
Peru	885,866	68,131	1,075,908	109,759	996,016	415,527
Portugal	...	10,804	...	...	...	207,360
Russia	...	4,538,737	77	4,348,085	280	5,660,338
Roumania	...	...	579,000	675.500	...	...
Servia	...	488,709	...	...	...	...
Siam	...	1,948,358	...	1,705,217	...	1,342,891
Spain	...	1,605,874	...	...	...	...
Sweden	...	49,044	...	217,509	...	714,428
Switzerland	386,000	308,800	386,000	386,000	579.000	653,305
Turkey	7,730,656	687,314	16,247,160	738,991	10,036,231	1,323,756
Venezuela	386,000	579,000	...	...	...	...
Total	245,954,257	145,331,224	366,326,788	155,490,466	411,803,902	221,652,826

No. 15.—World's Production of Gold and Silver.

CALENDAR YEAR 1905.

Country.	GOLD.			SILVER.			
	Kilograms (fine).	Ounces (fine).	Value.	Kilograms (fine).	Ounces. (fine).	Coining value.	Commercial value.
North America:							
United States	132,682	4,265,742	$88,180,700	1,744,995	56,101,600	$72,535,400	$34,222,000
Mexico	24,236	779,181	16,107,100	2,023,044	65,040,865	84,093,200	39,674,900
Canada	21,984	706,778	14,610,400	186,448	5,994,292	7,750,200	3,656,500
Africa	170,410	5,478,696	113,254,700	19,273	619,620	801,100	378,000
Australasia	129,291	4,156,692	85,926,500	467,666	15,035,486	19,439,800	9,171,600
Europe:							
Russia	33,542	1,078,384	22,292,200	6,375	204,960	265,000	125,000
Austria-Hungary	3,698	118,875	2,457,400	57,859	1,860,169	2,405,100	1,134,700
Germany	100	3,227	66,700	181,056	5,820,947	7,526,100	3,550,800
Norway				7,552	242,805	313,900	148,100
Sweden	55	1,775	36,700	770	24,765	32,000	15,100
Italy	66	2,128	44,000	23,570	757,777	979,700	462,200
Spain				124,417	4,000,000	5,171,700	2,440,000
Greece				25,786	829,025	1,071,900	505,700
Turkey	9	289	6,000	1,178	37,874	49,000	23,100
France				27,700	890,555	1,151,400	543,200
Great Britain	170	5,450	112,700	5,209	167,479	216,500	102,200
South America:							
Argentina	8	265	5,500	4,670	150,149	194,100	91,600
Bolivia	28	912	18,800	96,330	3,096,998	4,004,200	1,889,200
Chile	1,427	45,886	948,500	12,375	397,853	514,400	242,700
Colombia	3,888	125,001	2,584,000	21,127	679,245	878,200	414,300
Ecuador	284	9,117	188,500				
Brazil	3,076	98,906	2,044,600				
Venezuela	258	8,293	171,400				
Guiana—							
British	2,544	81,789	1,690,700				
Dutch	952	30,597	632,500				
French	2,798	89,955	1,859,700				
Peru	776	24,968	516,100	191,479	6,156,044	7,959,300	3,755,200
Uruguay	75	2,419	50,000				
Central America	2,277	73,212	1,513,400	42,347	1,361,449	1,760,300	830,500
Asia:							
Japan	4,623	148,625	3,072,400	82,888	2,664,842	3,445,500	1,625,600
China	6,771	217,688	4,500,000				
Korea	3,901	125,436	2,593,000				
Siam	73	2,351	48,600				
India (British)	17,981	578,089	11,950,200				
East Indies—							
British	2,093	67,299	1,391,200				
Dutch	2,128	68,436	1,414,500	5,689	182,889	236,500	111,500
Total	572,204	18,396,461	380,288,700	5,359,803	172,317,688	222,794,500	105,113,700

No. 15.—World's Production of Gold and Silver.

CALENDAR YEAR 1906.

Country	Gold.			Silver.			
	Kilograms (fine).	Ounces (fine).	Value.	Kilograms (fine).	Ounces (fine).	Coining value.	Commercial value.
North America:							
United States	142,001	4,565,333	$94,373,800	1,757,944	56,517,900	$73,073,600	$38,256,400
Canada	18,092	581,657	12,023,900	266,521	8,568,665	11,078,700	5,800,000
Mexico	27,889	896,615	18,534,700	1,717,738	55,225,268	71,402,400	37,381,400
Africa	203,669	6,547,943	135,358,000	21,850	702,464	908,200	475,500
Australasia	123,971	3,985,684	82,391,400	442,838	14,237,246	18,407,700	9,637,000
Europe:							
Russia	29,336	943,142	19,496,500	5,169	166,183	214,900	112,500
Austria-Hungary	3,935	126,519	2,615,400	56,184	1,806,322	2,335,400	1,222,700
Germany	121	3,890	80,400	177,183	5,696,433	7,365,100	3,855,900
Norway	...	...	...	5,458	175,475	226,900	118,800
Sweden	20	643	13,300	1,007	32,375	41,900	21,900
Italy	62	1,993	41,200	20,916	672,449	869,400	455,200
Spain	...	...	...	126,424	4,064,532	5,255,100	2,751,200
Greece	...	...	...	25,786	829,025	1,071,900	561,200
Turkey	9	289	6,000	1,178	37,874	49,000	25,600
France	756	24,305	502,400	22,378	719,453	930,200	487,000
Great Britain	44	1,414	29,200	4,268	137,216	177,400	92,900
Servia	90	2,893	59,800	...	...	...	...
South America:							
Argentina	8	268	5,500	449	14,440	18,700	9,800
Bolivia Chile	338	10,877	224,800	97,959	3,149,395	4,071,900	2,131,800
Colombia	3,296	105,982	2,190,800	23,743	763,335	986,900	516,700
Ecuador	443	14,233	294,200	423	13,592	17,600	9,200
Brazil	3,616	116,243	2,403,000	...	...	...	...
Venezuela	38	1,223	25,300	...	...	...	...
Guiana—							
British	2,419	77,770	1,607,700	...	...	...	...
Dutch	1,037	33,338	689,200	...	...	...	...
French	2,797	89,923	1,858,900	...	...	...	...
Peru	1,247	40,102	829,000	230,303	7,404,238	9,573,100	5,011,900
Uruguay	48	1,535	31,700	...	...	...	...
Central America	2,875	92,432	1,910,700	51,949	1,670,159	2,159,400	1,130,500
Asia:							
Japan	4,136	132,979	2,748,900	78,696	2,530,093	3,271,200	1,712,600
China	6,771	217,688	4,500,000	...	...	...	...
Korea	3,435	110,438	2,283,000	...	...	...	...
Siam	80	2,572	53,200	...	...	...	...
India (British)	18,188	584,744	12,087,700	...	...	...	...
East Indies—							
British	2,180	70,079	1,448,700	...	...	...	...
Dutch	1,888	60,706	1,254,900	7,721	248,240	321,000	168,000
Total	604,835	19,445,452	401,973,200	5,144,085	165,382,372	213,827,600	111,945,700

No. 15.—World's Production of Gold and Silver.

CALENDAR YEAR 1907.

Country.	GOLD.			SILVER.			
	Kilogram. (fine).	Ounces (fine).	Value.	Kilograms (fine).	Ounces (fine).	Coining value.	Commercial value.
North America:							
United States	136,075	4,374,827	$90,435,700	1,757,844	56,514,700	$73,069,500	$37,299,700
Mexico	28,109	903,699	18,681,100	1,901,934	61,147,203	79,059,000	40,357,200
Canada	12,614	405,553	8,383,500	397,505	12,779,800	16,523,400	8,434,700
Africa	228,257	7,338,468	151,699,600	24,586	790,431	1,022,000	521,700
Australasia	113,870	3,660,911	75,677,700	593,562	19,083,031	24,673,000	12,594,800
Europe:							
Russia	40,150	1,290,840	26,684,000	4,110	132,122	170,800	87,200
Austria-Hungary	3,739	120,209	2,484,900	54,253	1,744,233	2,255,200	1,151,200
Germany	100	3,220	66,600	158,261	5,088,086	6,578,500	3,358,100
Norway	....	....	....	6,268	201,516	260,500	133,000
Sweden	28	903	18,700	929	29,761	38,500	19,600
Italy	60	1,914	39,600	22,950	737,843	954,000	487,000
Spain	....	....	....	127,435	4,097,035	5,297,200	2,704,000
Greece	....	....	....	25,786	829,025	1,071,900	547,200
Turkey	7	216	4,500	2,095	67,351	87,100	44,500
France	756	24,305	502,400	22,378	719,453	930,200	474,800
Great Britain	44	1,414	29,200	4,268	137,216	177,400	90,600
Servia	90	2,893	59,800	....	....	....	....
South America:							
Argentine	155	4,985	103,000	783	25,178	32,600	16,600
Bolivia Chile	666	21,402	442,400	162,437	5,222,358	6,752,100	3,446,800
Colombia	4,898	157,491	3,255,600	32,619	1,048,719	1,355,900	692,200
Ecuador	402	12,923	267,100	76	2,456	3,200	1,600
Brazil	3,040	97,750	2,020,700	....	....	....	....
Venezuela	34	1,082	22,400	....	....	....	....
Guiana—							
British	1,963	63,099	1,304,400	....	....	....	....
Dutch	963	30,961	640,000	....	....	....	....
French	2,797	89,923	1,858,900	....	....	....	....
Peru	774	24,890	514,500	297,546	9,566,118	12,368,300	6,313,600
Uruguay	78	2,510	51,900	....	....	....	....
Central America	3,172	101,965	2,107,800	58,877	1,892,896	2,447,400	1,249,300
Asia:							
Japan	4,170	134,059	2,771,200	88,197	2,835,532	3,666,100	1,871,400
China	6,771	217,688	4,500,000	....	....	....	....
Korea	3,266	105,013	2,170,800	....	....	....	....
Siam	250	8,038	166,200	....	....	....	....
India (British)	15,624	502,307	10,383,600	....	....	....	....
East Indies—							
British	2,349	75,525	1,561,300	....	....	....	....
Dutch	2,477	79,637	1,646,200	10,033	322,560	417,000	212,900
Total	617,748	19,860,620	410,555,300	5,754,732	185,014,623	239,210,800	122,109,700

No. 16.—Production of Gold and Silver in

[From 1493 to 1885 is from a table of averages for certain periods, compiled by Dr. Bureau of

	Period.	GOLD.			
		Annual average for period.		Total for period.	
		Fine ounces.	Value.	Fine ounces.	Value.
1	1493-1520	186,470	$3,855,000	5,221,160	$107,931,000
2	1521-1544	230,194	4,759,000	5,524,656	114,205,000
3	1545-1560	273,596	5,656,000	4,377,544	90,492,000
4	1561-1580	219,906	4,546,000	4,398,120	90,917,000
5	1581-1600	237,267	4,905,000	4,745,340	98,095,000
6	1601-1620	273,918	5,662,000	5,478,360	113,248,000
7	1621-1640	266,845	5,516,000	5,336,900	110,324,000
8	1641-1660	281,955	5,828,000	5,639,110	116,571,000
9	1661-1680	297,709	6,154,000	5,954,180	123,084,000
10	1681-1700	346,095	7,154,000	6,921,895	143,088,000
11	1701-1720	412,163	8,520,000	8,243,260	170,403,000
12	1721-1740	613.422	12,681,000	12,268,440	253,611,000
13	1741-1760	791,211	16,356,000	15,824,230	327,116,000
14	1761-1780	665,666	13,761,000	13,313,315	275,211,000
15	1781-1800	571,948	11,823,000	11,438,970	236,464,000
16	1801-1810	571,563	11,815,000	5,715,627	118,152,000
17	1811-1820	367,957	7,606,000	3,679,568	76,063,000
18	1821-1830	457,044	9,448,000	4,570,444	94,479,000
19	1831-1840	652,291	13,484,000	6,522,913	134,841,000
20	1841-1850	1,760,502	36,393,000	17,605,018	363,928,000
21	1851-1855	6,410,324	132,513,000	32,051.621	662,566,000
22	1856-1860	6,486,262	134,083,000	32,431,312	670,415,000
23	1861-1865	5,949,582	122,989,000	29,747,913	614,944,000
24	1866-1870	6,270,086	129,614,000	31,350,430	648,071,000
25	1871-1875	5,591,014	115,577,000	27,955,068	577,883.000
26	1876-1880	5,543,110	114,586,000	27,715,550	572,931,000
27	1881-1885	4,794,755	99,116,000	23,973,773	495,582,000
28	1886-1890	5,461,282	112,895,000	27,306,411	564,474,000
29	1891-1895	7,882,565	162,947,000	39,412,823	814,736,000
30	1896-1900	12,446,939	257,301,100	62,234,698	1,286,505,400
31	1901	12,625,527	260,992,900	12,625,527	260,992,900
32	1902	14,354,680	296,737,600	14,354,680	296,737,600
33	1903	15,852,620	327,702,700	15,852,620	327,702,700
34	1904	16,804,372	347,377,200	16,804,372	347,377,200
35	1905	18,396,451	380,288,700	18,396,451	380,288,700
36	1906	19,445,452	401,973,200	19,445,452	401,973,200
37	1907	19,860,620	410,555,300	19,860,620	410,555,300
38	Total	....	....	604,298,371	12,491,958,000

THE WORLD SINCE THE DISCOVERY OF AMERICA.

Adolph Soetbeer; for the years 1886 to 1907 the production is the annual estimate of the the Mint.]

SILVER.				PERCENTAGE OF PRODUCTION.				
Annual average for period.		Total for period.		By weight.		By value.		
Fine ounces.	Coining valuo.	Fine ounces.	Coining value.	Gold.	Silver.	Gold.	Silver.	
1,511,050	$1,954,000	42,309,400	$54,703,000	11	89	66.4	33.6	1
2,899,930	3,740,000	69,598,320	89,986,000	7.4	92.6	55.9	44.1	2
10,017,940	12,952,000	160,287,040	207,240,000	2.7	97.3	30.4	69.6	3
9,628,925	12,450,000	192,578,500	248,990,000	2.2	97.8	26.7	73.3	4
13,467,635	17,413,000	269,352,700	348,254,000	1.7	98.3	22	78	5
13,596,235	17,579,000	271,924.700	351,579,000	2	98	24.4	75.6	6
12,654,240	16,361,000	253,084,800	327,221,000	2.1	97.9	25.2	74.8	7
11,776,545	15,226,000	235,530,900	304,525,000	2.3	97.7	27.7	72.3	8
10,834,550	14,008,000	216,691,000	280,166,000	2.7	97.3	30.5	69.5	9
10,992,085	14,212.000	219,841,700	284,240,000	3.1	96.9	33.5	66.5	10
11,432,540	14,781,000	228,650,800	295,629,000	3.5	96.5	36.6	63.4	11
13,863,080	17,924.000	277,261,600	358,480,000	4.2	95.8	41.4	58.6	12
17,146,612	22,162.000	342,812,235	443,232,000	4.4	95.6	42.5	57.5	13
20,985,591	27,133,000	419.711,820	542,658,000	3.1	96.9	33.7	66.3	14
28,261,779	36,540,000	565,235,580	730,810,000	2	98	24.4	75.6	15
28,746,922	37,168,000	287,469,225	371,677,000	1.9	98.1	24.1	75.9	16
17,385,755	22,479.000	173,857,555	224,786,000	2.1	97.9	25.3	74.7	17
14,807,004	19,144,000	148,070,040	191,444,000	3	97	33	67	18
19,175,867	24,793,000	191,758,675	247,930,000	3.3	96.7	35.2	64.8	19
25,090,342	32,440,000	250,903,422	324,400,000	6.6	93.4	52.9	47.1	20
28,488,597	36,824,000	142,442,986	184,169,000	18.4	81.6	78.3	21.7	21
29,095,428	37,618,000	145,477,142	188,092,000	18.2	81.8	78.1	21.9	22
35,401 972	45,772,000	177,009,862	228,861,000	14.4	85.6	72.9	27.1	23
43,051,583	55,663,000	215,257,914	278,313,000	12.7	87.3	70	30	24
63,317,014	81,864,000	316,585,069	409,322,000	8.1	91.9	58.5	41.5	25
78,775,602	101,851,000	393,878,009	509,256,000	6.6	93.4	53	47	26
92,003,944	118,955,000	460,019,722	594,773,000	5	95	45.5	54.5	27
108,911,431	140,815,000	544,557,155	704,074,000	4.8	95.2	44.5	55.5	28
157,581,331	203,742,000	787,906,656	1,018,708,000	4.8	95.2	44.4	55.6	29
165,693,304	214,229,700	828,466,522	1,071,148,400	7	93	54.6	45.4	30
173,011,283	223,691,300	173,011,283	223,691,300	6.8	93.2	53.8	46.2	31
162,763,483	210,441,900	162,763,483	210,441,900	8.1	91.9	58.5	41.5	32
167,689,322	216,810 300	167,689,322	216,810,300	8.6	91.4	60.2	39.8	33
164,195,266	212,292,900	164,195,266	212,292,900	9.3	90.7	62.1	37.9	34
172,317,688	222,794,500	172,317,688	222,794,500	9.6	90.4	63.1	36.9	35
165,382,372	213,827,600	165,382,372	213,827,600	10.5	89.5	65.3	34.7	36
185,014,623	239,210.800	185,014,623	239,210,800	9.7	90.3	63.2	36.8	37
....	....	10,018,905,086	12,953,735,700	5.7	94.3	49.1	50.9	38

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